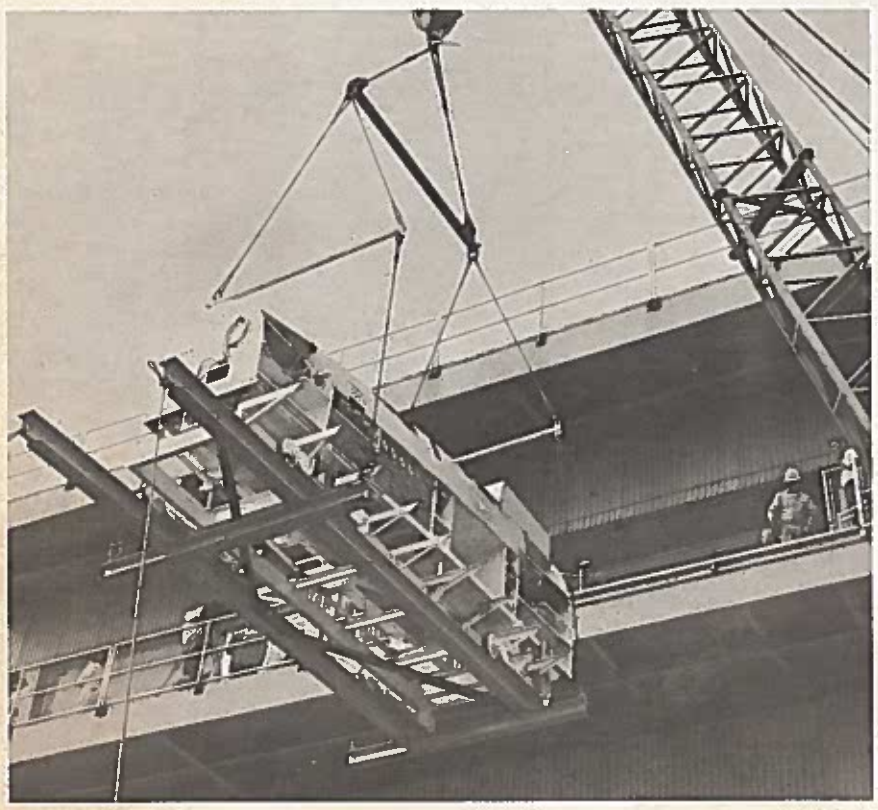
0835 2138

plane
# GRUMMAN
news

## Going higher . . .

Up, up, and away . . . well, maybe not with quite the same historic significance as when U.S. astronauts lifted off from the moon in Lunar Modules on two occasions last year, but this LM, shown being hoisted from a barge after it arrived in Japan, was on its way to Osaka for the '70 World Expo. To prepare the NASA/Gumman spacecraft for the exposition, where it will highlight the exhibit at the U.S. Pavilion, four men from Grumman traveled to Japan to assist in assembling the Lunar Module at Osaka. For their story on the trip, please turn to page 4.



## . . . and higher

Also on the way up . . . to a room with a view on the third deck of the Navy Missile Center's laboratory at Point Mugu, . . . is SITS (Systems Integration Test Station), a huge and powerful tool to be used in the flight-testing of the Grumman-built air superiority aircraft F-14. Mugu affords the advantage of real-time tracking and improved flight-test capability because of fewer radiation restrictions and proximity to major avionics suppliers. For a look at what it's all about, see page 3.

Vol. 29, No. 3, Bethpage, N. Y., February 16, 1970

# Expect Automated Telemetry System to speed delivery of F-14 to Navy

**Monitoring.** At the Data Analysis Station in Plant 7, Lynn Chesnut of Structural Dynamics Flight Test, and Jim Heacock, Pete Mihan (on phone) and Dan Dinkel, all of Propulsion Vehicle Flight Test, monitor flight data.

"It'll be the jazziest car on the road," is the way Tom Kastner refers to ATS, the Automated Telemetry System nearing completion at Calverton.

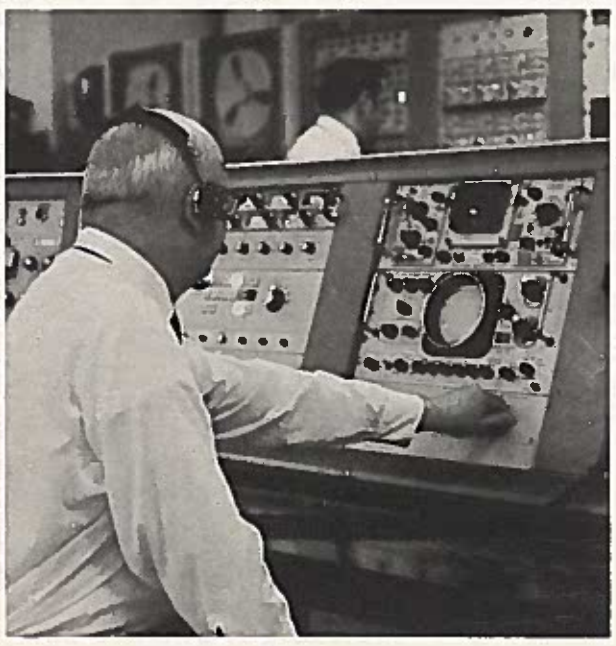
Of course, ATS is neither a car nor a road, but the metaphor is apt: the system is new to the industry and its potential value in helping to speed new aircraft through the design-production route is incalculable. In the case of the F-14, ATS will be one of the essential tools in the drive to cut the "normal" 34-month first-flight-to-BIS process to just 17 months.

That reflects the urgency of getting F-14 on line as quickly as possible. The Navy wants F-14. Fast.

How will ATS contribute to that need for speed? Well, consider the usual way of flight testing a new class of aircraft and contrast that with the new approach:

Kastner, manager of ATS, says that flight test data—by the time it's properly processed—comes in up to 12 (or more) days after the actual flight. During that 12-day period, other flights tests may be made; but in any case, the pilot is flying based on limited data and on the assumption that the information he's collected previously is valid. With ATS, though, the pilot and the man at the ground station will be getting not just data but "answers," too—and in real time. A two-week job is whittled down to one-half day.

How does that work? Well, while the pilot's flying, all sorts of measurements are transmitted to the ground station over a telemetry link— temperatures in various sections of the plane, loads on structure, pressures (say, on the wings, canopy, engine inlets), bank angles, roll rates, vibration. The land-based computer churns out answers as to maneuver limits and trend data, and reliable predictions are made: "Hey, ease off on those rolls!" or "We see vibration as you're climbing," or "Everything's looking good; let's skip maneuvers seven and eight and go on to nine instead."



**Rating it.** Mike Chartuk (with headphones) and Nat Mannino, both station operators, monitor the quality of telemetric signals coming in to the Plant 7 ATS during a flight of OV-1D Mohawk. (Photos by Dick Sander)

All this pilot and ground station voice communication is tied into what's happening in the air and at the ground station. The engineer at that station knows more about what's going on "up there" in a technical sense than the pilot does. The pilot flying the aircraft and the engineer at the ground station become a true team.

"The pilot sees his normal instruments," explains Ray LeCann, director of Computer Operations, "but it's the engineer at the ground station who picks up the 'answers'."

### Flight test backup

This in no sense downgrades the pilot and his functions. If anything, it allows him to concentrate even more on his piloting and evaluation tasks. He's backed up by a crew of flight test engineers acting on real-time information to provide not only technical support but significant safety monitoring. Now, more than ever, the pilot can perform those vital and somewhat intangible chores of making qualitative judgments about his plane's performance.

"These qualitative judgments, these 'gut' reactions and the 'feel' of an aircraft, however difficult they may be to pin down exactly, are very important," remarks ATS Accounts Manager Dave Holtje. "The pilot has to have faith in that plane or he and the aircraft are in trouble."

Part of the sought-for faith stems from the pilot's confidence, part from analysis of post-flight data; and, with ATS, part from the direct communications link between the pilot and the ground station engineer who has answers (not just data) on what is happening on a flight as it is occurring. The real-time picture also allows the ground engineer to "direct" flight maneuvers —an especially important item if flight parameters are in danger of being exceeded.

### Space spinoff

The real-time concept was a spinoff from Grumman experience in spacework, the LM Data Reduction Station. By adding the ability for a test engineer to talk to the computer in real time we have an answer-producing capability that can react to the flight as it develops.

Partial use of ATS on the EA-6B, OV-1D, and the C-2A is proving the capability of this equipment. And when the ATS complex is finally completed—with on-board tape recording, telemetry, and ground station—the ATS will be capable of supporting up to three separate test flights at a time. It is this capability that will help produce the F-14 in the promised time.

"Time and money are critical factors in the new system," says Kastner. "We'll be doing the flight testing faster, better, and more economically; the pilot-engineer team should permit our going through a series of flight test maneuvers 60 to 100 percent faster than before. And in the bargain, we get improved safety and more information in less time. How can you top a combination like that?"

**Checking 'birdcage.'** The EA-6B underbelly equipment, including an on-board recording system, gets a check by Jim Ryan, Flight Data engineer, and Ed Maroney, Instrumentation technician.

## Big splash

Grumman's Aquatic Association will make a big splash in the entertainment field next week, going to the movies and then dining and dancing.

According to Association president John Reeves, two films will be projected at the next general meeting on Thursday night, February 26, in the Larkfield Surburban Club, East Northport, at 8:30 p.m. Both are rated G (that's for Good) and were made by Presentations Services. On the bill is "Launch 'Em," a humorous film made aboard an aircraft carrier; and "In the Proud Tradition," showing the USS Flagstaff in open water trials and weapons testing off the coast of Florida. The Flagstaff is a hydrofoil gunboat constructed by Grumman.

The big night, however, will be on Saturday, February 28, when the Aquatic group holds its first dinner-dance at the Thatched Cottage, Centerport, starting at 9 p.m. This affair is open to non-members, and reservations may be made with Edie Torresson in Plant 34F, Ext. 7091. The tab is $10 apiece.

# Challenges are limitless

At a recent conference in Washington, President Lew Evans spoke out plainly to NASA officials, companies involved in space work, and businessmen about budget cuts for space efforts, and he challenged them to "make major adjustments in our programs and methods of operating for the future."

Lew said that the national budget was a tight one, with "plenty of room in it for doom and gloom." He, like others, sees layoffs in NASA and in industry at large, including a tightening of the belt on Long Island. At the same time, however, he said:

"It's time to simplify our products; to make them more reliable; and to give the Nation a better return for each tax dollar invested. To put things in perspective: NASA is planning to spend more R&D dollars to define our next program than I think was used to define Apollo. There is plenty of money to generate new ideas, and we do have a strong base so let's move out with confidence."

### Benefit to mankind

In calling on the industry to use the pioneering technology of the space programs, he mentioned new programs—programs that would be "for the benefit of all mankind." He saw an exciting future in an earth-to-orbit space shuttle, an anti-pollution "space reflector" (maybe a mile in diameter) that can "direct the sun's energy to create a hole over our cities (to) act as a chimney to evacuate smog," an advanced technology satellite for instructional TV, computer processing of transmissions that might ease airway congestion problems, and a prototype (already developed) to transport human organs safely for transportation.

As Lew said, "The challenges and potential are limitless."

**SITS briefing.** Grumman F-14A Project representatives at Plant 88, Point Mugu, brief Cdr. James E. Tucker (seated), Naval Missile Center Project Officer, on the workings of SITS. Grummanites (L to R) are: Tony Benjes, Manager, Grumman Operations at the Center, Rudy Kretschek, F-14A Engineering Manager, and Tom Brancati, Deputy Manager for Grumman Operations. (US Navy photo)

# SITS will be 'flying' at Pt. Mugu to help slash test time on F-14

The "monster" was moved to Point Mugu (Plant 88), hoisted to the third floor, and positioned to "do its thing."

Decoded, SITS is the System Integration Test Station; it is being readied to simulate some of the avionics flight testing for the F-14, and to do that on the ground rather than in the air.

"This development tool will provide a step-by-step buildup to a completely integrated and operational weapons system," says Tony Benjes, F-14 Base director at Mugu. "We know that the concept is sound—that was proved through experience with it for EA-6B at Calverton—and we expect that SITS is going to cut down flight-test time very significantly."

Briefly, SITS is a nose-to-tail on-the-ground structure with supporting computers. It has all of the avionic elements that will be in F-14, all laid out on equipment racks in exactly the way they will be located in the aircraft. The mockup will be wired and tested, black box by black box, and in combination, the avionics components will be lifted out and placed directly into the F-14.

"Doing it this way," says Tom Brancati, "has to save lots of time and money —both crucial factors in F-14 development — because the educated guesses about what may be avionically out of kilter as a pilot is testing a plane have been ironed out beforehand as a result of SITS. This means the end of the old, tedious, expensive, stretched-out flight-test practice of having to get back to ground, check out the 'glitch,' and fly again to see if the bugs have been worked out.

"With SITS, the pilot may need only 15 flights; without SITS, there could be, say, 50 flights. That's quite a time-and-cost differential."

The first plane to be delivered (No. 4) will be at Mugu next year. As of now, Grumman has 86 engineers and specialists at Mugu. The build-up is expected to be 400 by mid-1971.

**Board Chairman** of Bankers Trust Company, William H. Moore, tries cockpit of F-14 on for size during recent visit to Bethpage. Vice President Mike Pelehach briefs Moore on the new Navy fighter, while listening in are Pat Cherry, Grumman Corporation Treasurer-Controller, and John Dahl, Treasurer's Office.

# Myers heads slate for Model Society

George Myers of Space Project Engineering has been renamed president of the Grumman Engineering Model Society, which has scheduled its next model airplane competition on February 28 at Mitchel Field. This event is the Coupe d'Hiver, boost glider.

Serving as officers again for the GEMS will be Joel Chesler, vice president; Harvey Knopf, secretary; Phil Kleisler, treasurer; Karl Birkel, contest director; and Henry Prew, publicity. Myers may be contacted on Ext. 1341.

Attention of newcomers is called to the club's next meeting, slated March 10, at 7 p.m., in Room 1, Plant 28.

## Special Insert

Word on the election of three senior vice presidents and five vice presidents came too late for the regular edition of Plane News—but not too late to include in a special insert in this issue.

# Data Systems elects Dr. Pounds to Board

"We are fortunate to get such a man as Dr. William F. Pounds as a member of the Board of Directors," said Pete Viemeister, President of Grumman Data Systems Corporation, a subsidiary of Grumman Corporation.

Dr. Pounds, who is Dean of the Sloan School of Management at Massachusetts Institute of Technology, was recently named as a member of the Panel on Science and Technology for the House of Representatives' Committee on Science and Astronautics.

He has degrees from the Carnegie Institute of Technology and has been with Pittsburgh Plate Glass Company and Eastman Kodak Company. For four years, he was a U. S. Navy aviator.

Dr. Pounds is also the author of many technical articles and papers dealing with industrial engineering and management.

# Lunar Module to be star of U.S. exhibit at Japan's Expo '70

In the United States Pavilion at the Japan World Expo in Osaka, there's going to be one whale of a traffic jam beginning March 15, when the fair opens. A real Lunar Module, comprised of the LM-2 ascent stage and the LTA-8 descent stage, promises to be the show stopper.

"The Japanese are very space conscious. Judging from the excitement LM generated on arrival. I'd say our exhibit could create quite a bottleneck," said Bob Specht, LM-2 project engineer. He and three others from Grumman returned last month from setting up the LM in the United States Pavilion, pleased and a little overwhelmed at the enthusiasm of the camera fans and the press. (About 50 reporters came to the first press conference held by Specht with the help of a United States Information Service interpreter.)

### Earthbound vehicle

The newsmen were under the impression that this LM would be going to the moon one day, and Specht had to explain that if it were refurbished and sterilized (his listeners thought that was very funny), it could conceivably fly, but that it had lost its cleanlines in transit and had been subjected to undetermined stresses and strains. Also the ladder had been beefed up to hold the weight of a man (which the original ladder will not do, except in 1/6 gravity), and the purposely crushable honeycomb in the landing struts had been replaced with more substantial material to bear the earth weight of the vehicle. The LM does, however, have almost everything else, he explained, including the electronics systems, instrument panels, and engines.

"And it's very colorful with the gold Mylar shielding and the black and silver," Specht said last week. "It's impressive standing there, 22 feet, 11 inches tall." There will be a simulated lunar landscape around it, with mannequins wearing space suits and PLSS packs, doing something with one of the lunar mission experiments. A railing around the exhibit will keep the crowd at a safe distance, and a NASA representative has been assigned to supervise it.

The idea for using LM as the focal point of an American space display was broached to NASA last year by the United States Information Service. NASA agreed to provide a Lunar Module and made a contract change to cover Grumman's preparation for shipping and for the actual sending of the two stages and the personnel to set them up.

In addition to Specht, there were three who went to Osaka: Dick Moulton, S/CAT deputy manager of LM Manufacturing; Duane Grant, GSE engineer, who was responsible for the transportation and went over ahead of the others; and George Brown, S/CAT Manufacturing technician.

The LM-2 ascent stage was sent to Houston from Bethpage, and from Houston it and the LTA-8, modified to look like the LM-5 descent stage, were shipped by freighter to the port of Kobe. There they were off-loaded to barges, and delivered to Osaka.

**Big welcome.** Japanese show lively interest in Lunar Module provided by NASA, with Grumman's help, as principal exhibit in the United States Pavilion, Expo '70, Osaka. The LM-2 ascent stage, safely arrived, is about to be moved (with inches to spare) through pavilion tunnel.

To much flashing of flashbulbs the spacecraft was moved, very cautiously and gently, into the U.S. Pavilion—a building that does not easily accept LM-size exhibits. It has a plastic dome roof and is pressurized, with double airlocks. The parts of LM had to be eased through these airlocks and through a tunnel, with only inches to spare.

Since LM had to be installed ahead of the other exhibits, the Grumman representatives felt they must waste no time, and they delighted the Japanese with their zeal in getting the job done.

"We worked seven days a week," Moulton said, "and this apparently surprised them. They weren't used to such hard-working Americans.

### Enthusiastic assist

"We let some of the Japanese workmen help us install the struts, explaining through an interpreter that these were very fragile and must be handled carefully," he said. "They were pleased to be allowed to help us and were so enthusiastic we could have bought the whole of Japan that day!"

The quartet wore Grumman jackets to which they had added Apollo 11 patches, "and the Japanese kept coming up to take pictures—just of the patch!" Moulton said.

Moulton had a bit of a jolt upon arriving at the Tokyo airport. He heard himself being paged on the PA and immediately thought, "Something must have happened back home!" But it was Scribner McCoy of Grumman International, Japan manager in Tokyo, there at the airport to be helpful. "He acted as our interpreter and accompanied us to Osaka on the Super Express," Moulton said, adding that the ride on the famed train was "fabulous," with spectacular scenery, a snowstorm encountered on the way, and pretty hostesses dispensing "little box lunches."

LM, along with a Command Module and an F-1 main booster engine from the Saturn, will continue on display until the fair closes September 13. Plans are for the Smithsonian Institution in Washington to get this LM for permanent exhibition following the closing of "Expo '70."

# Hicks hauls in bond award for savings idea

Harry Hicks, leadman in Plant 2 Hydraulics, tucked away a bundle of bonds the other day—$550 worth—for a useful suggestion that saves lots of tubing rejects in his department. With this idea he leads a long train of Employee Suggestion winners named for awards over a period of two months. The total face value of Savings Bonds presented for good ideas and inventions during the two months was $5425.

Hicks, impatient with a situation where plastic dies separated at the tangent point as metal tubing was being bent, suggested using a tool insert at the tangent point to absorb pressure from the tubing at this critical spot. The number of rejected dies and lengths of tubing has decreased substantially as a result of this idea.

Other winners of Savings Bonds were:

$300: Stanley Zaluska, Small Parts Fabrication, Plant 2.

$275: William Mullins, Final Assembly, Plant 55, Savannah.

$250: LaMar J. Cress, Flight Operations, Plant 4.

$225: Robert Romeo, August Nigl, and Joseph Gabriel (just retired), Propulsion Test, Plant 2.

$200: William Mullins, Final Assembly, Plant 55, Savannah; William Penix, Electronic Flight Development Operations, Plant 6.

$175: Mario Conforti, Fuselage Major Assembly, Plant 36; Joseph Molinaro, Electronics Repair, Plant 6.

$150: John Cholewka, Plant Stores & Distribution, Plant 2; Arthur Scheib, Ground Test Instrumentation, Plant 5, and Paul Wagner and Dominick Visceglie of Instrument Fabrication Repair; Alfred Vachris Jr., Flight Mechanics, Plant 35; John Zaleski, Small Parts Fabrication, Plant 2.

$125: Joseph Digangi, Final Assembly, Plant 36 (formerly Small Parts Fabrication, Plant 2); William Dwyer, Upholstery, Plant 29.

$100: Walter Csadenyi, Tool Fabrication - Metal Form Tool, Plant 2; Eugene Donovan, Fiberglass, Plant 27; Victor LaRocca, Instrument Fabrication Repair, Plant 7; Paul Lieb, Grind & Jig Bore, Plant 2; Albert Macias, KSC Quality Control, Plant 83; Alfonso Naporano, foreman, and Frank Leotta, asst. foreman, Machine Shop, Plant 3; Dennis O'Brien, Industrial Control Maintenance, Plant 23; Paul Presti, S/CAT Engineering Services & Administration, Plant 39.

$75: Thomas Beale, Fiberglass, Plant 27; Carlo Bello, Sub-Assembly, Plant 36; Anthony Bessereale, Flight Operations, Plant 7; Susan Scalise, Instrument Test, Plant 33; Howard Winkleman, Final Assembly (formerly Honeycomb), Plant 3.

Ideas for saving time and money can run into awards of several thousands of dollars. They are easily implemented. Pick up a copy of the Employee Suggestion form at any Employee Services Office.

# Pay now, go later on jet trip to Spain

If you're planning a low-cost trip to Spain, the place to be tomorrow night—that's Tuesday, February 17—is in the Employment Office waiting room, Plant 28, Bethpage.

Starting at 5:30 p.m. the GAA will sign up applicants for the package tour scheduled to leave JFK on September 18 for the land of the senoritas. The entire fee of $295 apiece must be paid at that time, and checks should be made out to the Bethpage Aircraft Tour Club.

Grumman employees, their spouses, parents, or dependent children residing at the same address, are eligible for this attractive offer. The $295 fee will include round trip fare, transfers, tips, and modified American Plan with two meals a day.

## Our goof(s)

In the January 30 issue of Plane News, we stated that Newt Spiess, director of Product Development, was responsible for corporate Research among his other duties. Our apologies. Dr. Charles Mack has headed Research for some time; he reports directly to Senior Vice President Grant Hedrick.

And Nick Scobbo, manager of Field Service, was surprised to find out that only 18 of his men have served in Vietnam since 1962—he thought it was more like 80. As a matter of fact, 18 Field Service representatives have been assigned to Vietnam since 1962 with the Army; a total of 62 others have served with the Marines.

**Graduation day** for NAB trainees included luncheon and special ceremony to mark the conclusion of their training period.

**On hand** to congratulate the graduates were (L to R) Bob Caupain, Joe Gold, and Harry Volz, who presented diplomas.

**NAB graduates,** who received training in clerical, production, and electronics, are working in many areas of the Company.

# NAB-Grumman program helps people to build, market skills

It began in August of 1968 and is now phasing out: an effort by Grumman, under the aegis of the U.S. Department of Labor, to help disadvantaged people to acquire marketable skills. At its peak, the NAB (National Alliance of Businessmen) program directly trained 270 people, and more than 100 of them continue on the Company payroll.

It was a tough program to run, largely because many of the people who were brought in for training had never had a real chance for steady employment, much less a job with a future. Many were grossly under-employed, not getting an opportunity to exploit their potential. Many were shuffled about, forced to lean on odd jobs, and thereby having spotty employment records; as a consequence, many employers were loath to hire them, perpetuating the deplorable cycle.

No wonder, then, that a lot of the disadvantaged ran through what Wendell Johnson called the "IFD" cycle: Indifference, Frustration, Demoralization.

Yet, against such a background, NAB Program Manager Joe Gold says:

"Over all, it moved along pretty well. Certainly if you look at it from the standpoint of how NAB programs fared in other companies, ours was darned good. We had one official tell us 'If you keep a trainee for six months, you've done a good job,' and we beat that score.

### Some dropouts

"Viewed realistically, we expected—from the very beginning—that we could not get all of the trainees through. In that sense, it wasn't a surprise when there were dropouts."

And dropouts there were, and Gold and his staff often could not discover why. They had guesses—uneasiness, a fear of possible failure, problems at home, unwarranted suspicion, inability to change old habits—a host of things that the staff will never know about.

But there was a bright side, too. Talk with Glenn Williams of Parts Paint, Plant 2, for instance. He got into the program last July following eight and a half years as a seaman, his last duty on the USS Oriskany. He confesses that he failed to learn a skill in the Navy; but he's "turned himself around" as a result of being a NAB trainee.

"A lot of people treated me more than fairly in the program and on the job. My boss, Vic (Kosikowski), has helped a lot. I like him, and I guess I'm making out okay. . . . I moved up now, stamping small parts of various aircraft."

"He's a real worker," Vic says. "Of the four who came in from NAB, he's the one who worked out best here. A good man."

### Successes, too

Bob Zambito of Electronic Test in Plant 14 was one of the people in NAB to come in "over qualified," meaning that he was already skilled because of having worked, on his own, for a decade in repairing radio equipment. With a minimum of formal education in the field (he recently received his high school equivalency diploma), aptitude tests all pointed to one field—electronics.

"I studied books a lot and learned how to perform the key electronics duties. I read everything I could get my hands on, and since coming on the NAB program, I've taken several Grumman training courses, and I'm thinking about going to college. With a wife and three kids to support, that'll take some time. . . ."

As for NAB and Grumman, Bob says "It's beautiful. All's well with me."

So there were successes as well as problems, but some of the "wins" were impressive because of the problems: in other words, for many of the trainees, down at the bottom of what might be called the job achievement ladder, this was the first sweet taste of self-confidence—proof that they **could** do a worthwhile and productive job.

The road was rocky, though. As Gold points out, "This was the first time we got into a program like this and we bobbled the ball a bit at the beginning. I guess that was part of the learning curve. As we went along we found out that if there's a next-time-around, we'd do things differently. We found there's a need to schedule according to current job requirements. In a corporation such as Grumman, skill needs vary constantly; today we need riveters or clerk-typists, tomorrow spray painters or industrial truck operators, and the following day welders or machine operators; so you recruit for a specific open job, not for a job that might be open in the indefinite future.

"And I think we should move early to brief our supervisors and leadmen so they know what's coming and why. We could have eased their problems had we done that—which is no reflection on them, they handled things very well. Because of the individual problems involved, it was impossible to foresee all the trouble spots."

In the end, when you sit down and survey the results, you see pluses and minuses. "On balance, though," says Gold, "I think it's fair to say the pluses dominated."

# MacLeod heads Flight Crew Integration

**Scott MacLeod**
*Checking script with CBS man*

Grumman's intent to expand its role in future space programs is underlined with an announcement by Vice President Joe Gavin that Scott MacLeod is now director of Flight Crew Integration for all space programs. He will be rseponsible for close contact with the customer—NASA and the astronauts—in the early stages of mission planning, and he will have the authority to insure that the needs and desires of the customer are met, from proposal stage to hardware.

MacLeod continues as chief consulting pilot. His office is in Plant 39, Ext. 1130.

This past year, Scott MacLeod (real name, Richard) was probably the most photographed man in Grumman. During the Apollo flights he was stand-in for the astronauts on CBS television simulations telecast from Plant 4 in Bethpage. Time after time CBS commentator Walter Cronkite called upon Scott's great fund of knowledge to explain technicalities of the lunar missions, and during the Apollo 12 mission, when the TV camera on the moon gave up, he was astronaut Pete Conrad's stand-in for the complete moon walk.

He started flying when he was in grammar school, and from 1943 to 1946 he was in the Navy Aviation Cadet Program. His first civilian job after college was with NASA (at that time NACA) as aeronautical research scientist, and then he returned to the Navy during the Korean conflict, flying carrier-based jet aircraft.

Since joining Grumman in 1955 as a Flight Test engineer, he has been deep in space projects, beginning with OAO in 1962 and subsequently working in Advanced Systems on satellites and space stations. As consulting pilot on LM he has been in close and constant touch with NASA and the astronauts.

MacLeod is president of the Society of Consulting Pilots and is a lieutenant commander in a Navy Reserve jet attack squadron flying out of NAS New York.

The MacLeods and their three children live in Melvile.

### Holiday schedule

Since Washington's Birthday falls on a Sunday this year, Grumman will celebrate the holiday on Monday, February 23. Have a happy. Because of the day off, Plane News' next delivery date will be Monday, March 2.

# They're celebrating—31 reach silver status, five hit 30-year level, one marks 40th year

He was a Jimmie-come-lately, but only by a month. Jim Wallace, Product Manufacturing administrator, Plant 5, who wears Permanent Number 12 on his badge, becomes a 40-year man this month. He leads an anniversary list that includes five 30-year men and 31 25-year men. Wallace signed on at the first Grumman plant, in Baldwin, on February 5, 1930, and has been with the Company ever since.

The men celebrating 30 years with the Company in February are: Otto F. Pook, foreman of Final Paint, Plant 6; John S. Erickson, P/S Factory Support Administration, Plant 34; William I. McCabe, Engineering manager, F-111, Plant 36; Harold A. Larkin, KSC Base Management, Plant 83; William R. Meyer, P/S Aircraft Systems Service, Plant 94, Norfolk, Va.

•

The 31 men marking 25 years' service are:

**PLANT 1:** George P. Einsenhauer, Advanced Programs - Mfg. Plans/Cost.

**PLANT 2:** Joseph A. Miller, Press; Egbert D. Knapp, asst. foreman, and Ralph J. Marro, Drop Hammer; John F. Ingellis, Center Section Final; Frederick P. Schumacher, Support Equipment Production; George Layne, Production Control - Parts Control Detail (nights); William C. Zimmerman, Production Control - Mangement; Eugene Jeskin, Tool Fabrication - Loading/Tool Control.

**PLANT 3:** Bryant K. Driscoll, foreman, Press; Robert Bornschein, Honeycomb; William H. Wandelt, Fuselage Assembly.

**PLANT 5:** William A. Heuslein, Business Development.

**PLANT 7:** Bernard J. Braun, Hydraulics.

**PLANT 14:** William C. Frederick, Lab Test Development.

**PLANT 17:** Nicholas H. Candito, Facilities Maintenance.

**PLANT 20:** Anthony S. Goscinski, Transportation.

**PLANT 22:** Joseph A. Siniscalchi, Advanced Programs - Support Mfg. Plans.

**PLANT 27:** William F. Smatlak, QC Labs.

**PLANT 29:** John R. Ketcham, Plant Management & Staff.

**PLANT 30:** Francis P. Mezzacapo, Requirements Planning Administration; John A. Tarasevich, Machine Parts/Raw Material; Ernest Perinetti, Machine Parts/Raw Material Admin.; Edward E. Zitek, General Purchasing Admin.; Henry Matthews, General Purchasing.

**PLANT 33:** Edward A. McDonnell, Avionics Installation; Edwin A. Schneider, Flight Avionics.

**PLANT 34:** Stirling Klein, P/S Program Supply Staff.

**PLANT 36:** Henry C. Koraleski, Final Assembly.

**PLANT 41:** Alexander I. Robertson, Project Administration.

**PLANT 77:** William H. Bedell Jr., Flight Crews, Stuart, Fla.

•

One women and 15 men are observing their 20-year anniversaries:

**PLANT 2:** William R. Trukalfa, Press; Robert B. Smith, Small Parts Fabrication; Vincent J. McAvoy, Hydraulics.

**PLANT 3:** Rocco Loya, Spotweld.

**PLANT 4:** John W. Safford, Machine Operations - Tech Services; Warren A. Lipman, P/S Structural Mech. Engineering Design; Frederick Gauch Jr., Projects - Aircraft.

**PLANT 6:** Thomas M. Harmon, Measurements Technology.

**PLANT 15:** Lillian Van Sise, Program Management, F-14A.

**PLANT 17:** Dominick Granato, Shipping & Spares Consolidation.

**PLANT 29:** John J. Falque, Prototype; John Teufel Jr., Advance Programs - Support Manufacturing Plans.

**PLANT 30:** Robert G. Vanderbilt. Communications Administration.

**PLANT 33:** George E. Bennett, Wire.

**PLANT 36:** Henry H. Zierman, Fuselage Minor Assembly; Charles A. Remmert, Surfaces & Assembly.

*(Continued on page 11)*

## Those were the days

The 31 joining Grumman's Quarter Century Club this month may perhaps recall that February of 1945 was a month of severe cold, snow, and ice. The particular plight of the motorist struggling to work that winter is brought to mind by an article in a 25-year-old Plane News (February 1, 1945). Grumman motorists were being warned "over the radio and in the press" of the seriousness of the transportation problem, it said.

"For with each passing year of the war," the article pointed out, "the automobiles on the road are aging accordingly, and when they finally get beyond repair, no replacements are to be had. Also parts for repair jobs are getting harder and harder to obtain, so that when cars are laid up for repairs it is sometimes several weeks before needed parts can be found. . . .

"Grummanites are urged to take the best of care of their cars and to drive with caution in order to avoid unnecessary accidents," readers were warned.

Lack of replacements (because almost all metal had gone to war), plus the rationing of gas and tires and the widespread use of car pools, made winter driving in early 1945 just a mite worrisome for the men and women building Hellcats in Bethpage.

G. P. Eisenhauer
Adv. Programs

J. A. Miller
Press

E. D. Knapp
Drop Hammer

R. J. Marro
Drop Hammer

J. F. Ingellis
Ctr. Sec. Final

F. P. Schumacher
Supp. Equip.

W. C. Zimmerman
Prod. Contr.

E. Jeskin
Tool Fab.

B. K. Driscoll
Press

R. Bornschein
Honeycomb

W. H. Wandelt
Fuse. Assem.

W. H. Heuslein
Bus. Develop.

B. J. Braun
Hydraulics

W. C. Frederick
Lab Test Devel.

N. H. Candito
Facils. Maint.

A. S. Goscinski
Transportation

J. A. Siniscalchi
Adv. Programs

J. R. Ketcham
Plant Mgt.

F. P. Mezzacapo
Req. Planning

J. Tarasevich
Machine Parts

E. Perinetti
Machine Parts

E. E. Zitek
Gen. Purchasing

H. Matthews
Gen. Purchasing

E. A. McDonnell
Avionics Inst.

**Shuffling off** to high popularity during the winter season as a lunch-period activity is shuffleboard, and the GAA has tournaments or leagues getting underway in at least a dozen plants. Like bowling, and bocce, too, the girls are now stepping in to match their skill against the men, and have made rivalries much keener. Here is a typical action picture in Plant 16, Hicksville, showing Carol Schmidt in a match against Eileen Koehler (R) with an enthusiastic rooting section.

## Take a look

Hey, there! Before you dash off to another department with a toolbox full of special tools, take a squint at what you've got . . . and if you're not going to use some of those tools and materials, why not take them to the tool crib or AN stock so someone else can use the stuff?

There's a good reason for doing things that way; after all, a tool you're not using that's sitting in your toolbox is a tool out of circulation. And how often have **you** searched and searched for a special tool you need on the job and it just isn't there? So you're hung up. (And what unprintable thoughts explode in your brain!)

The Conservation Department reminds us that special tools cost money—and that money collects no interest in a toolbox.

So ease the strain all around. Put unneeded tools back in the crib or AN stock.

# in the SLIPSTREAM

### LM 'N' Aids

**by Tim Strada**

A shock wave went through the office when the December State Lottery drawings took place, but everyone is back to normal again after learning of another group called Road Runners. . . . A sight to behold—Stan Fabinski, who owns a 1954 Chrysler, and Ray Cuneo in a 1965 Volkswagen jockeying for the same parking spot. . . . Contest for the most outstanding shirt ended in a tie last week with John Coyle featuring Irish green and Al Abruzzo, Italian Poiple. . . . Famous department expressions: Jack Kelly—Anyone looking for an ambulance? Ray Van Housen—Have Buick with low mileage for sale.

### High Finance

**by Ron Maginnis & Annette Montaperto**

Things are a little quieter in Invoice Audit since Don Picerno left for his new adventure. . . . Barbara Thalen's calendar in C & A is quite an eye-stopper—makes you look forward toward summer. . . . Marilyn Giordano became Mrs. Valenti on January 24. . . . Linda Mraz and Brian Scheu tie the knot on February 21. . . . The Accounting Department welcomes Shelly Feitlan, Kathy McCulloch, Judy Dommernuth, and Mario Echemendia. . . . Once again John Caputo is preparing to give Accounting a break by taking a vacation in Florida and Bermuda. . . . Keep May 15 open, as that is the scheduled date for the Accounting Department's "Anual Bowling Tournament." . . . Condolences to Bob Ingram on the recent death of his father. . . . Helen Marx and Gary Link now residing in C & A.

### Manufacturing Technology

**by Nettie Wagenknecht**

Get-well greetings to Lorraine DeGaidano, Dee Parris, Monica Wojtyniak, Charlie Coffill, and Dick Mase. . . . Mary Ann Kiefor had one of the nicest baby showers ever. Marlyn Middleton, carrying a large sheet cake, went sliding on the ice. Good old Marlyn did not drop the cake. . . . Bilzi, remember to have your car inspected after January. . . . Is King Frieman losing weight these days? . . . Ask Betty Codolutoto to do her thing. . . . Frank Ambrosio is on a strange diet. For coffee break it is coffee with no sugar and a bun.

### Upholstery Dept.

**by Harry Marshall**

Sorry to hear of the auto accident of Guard Jonesy. We all hope that he is back real soon. . . . Harold (Tom Mix) Bettis and George Lewis paying the boys a visit over the holidays. . . . There was a white-haired man ho-ho-ho-ing Christmas week and his name certainly was not Santa Claus. . . . Good to see Maurice Agnello once again. He's enjoying his retirement. . . . Charlie Logalbo back to work after a long illness. . . . The favorite sport in this department is girl watching. . . . Bill Dwyer was in Puerto Rico to visit his sister. . . . All the boys miss Al Runge, who has now retired. . . . What is happening to all of Eddie Birkett's tropical fish? . . . Walter McFarland celebrated his 20th anniversary with the Company. . . . Sam Ruggiero is home from the hospital and doing very well. . . . John Perino, Ronnie Sica, Hank Musial, and Frank Fox starring in the Grumman Bowling League.

### Plant 12 Hot Shots

**by Frank Mitchell**

Charlie Muller informs me that he and the Lucky 10 won $100 in the State Lottery and are "in line for the big one." By the way, be kind to Charlie. His boy just won his black belt in karate while with the Air Force in Maryland. . . . Russ Cox all smiles and back on the night shift. His daughter was nominated for national collegiate Who's Who for getting good grades. Proud pop. . . . Harvey Mason received his diploma from Grumman Computer School. . . . Some new people added to 031. . . . Best wishes to Robin Philp and Dan Munsch. Welcome. . . . Our deepest regrets to Ol Platt on the sudden death of his dad. . . . And we all hope for the return of Frank Cappiello, Frank Cilento, Leo Dreese, and Frank Jeans soon.

### Headlines of 33

**by Dorothea J. Keegan**

Joe Grella and Dotty Stellges, Plant 33 representatives of the Grumman Aquatic Association, are seeking information of anyone interested in a tour of a submarine and sub base at New London, Conn. Cost of round trip is $5 per person. For more information call Joe or Dotty, Ext. 9822. . . . Tom and Rudy Avitabile appreciate your kind expressions of sympathy in their recent bereavement. . . . Edith Kerbs of Administration learning Italian, via the sign language, from George Adesso. . . . Charlie Greco shaved his mustache, now that Stan Wylie is growing one. . . . A much belated welcome to the people in the SACE area in Plant 33, and congratulations to the new daddies in that area. . . . Bill Schoof, who retired in December, asks to be remembered to all and to express his thanks to all who participated in his farewell dinners. . . . Whatever happened to John Woodworth's pet spider after John left on his honeymoon?

### P.O.D.

**by Chuck Burdman & Angela Sanchez**

We'd like to welcome our new section planner, Dennis Mannix. . . . We'll likely be out one administrator if he doesn't make sure he's awake before shaving in the morning from the looks of things. . . . Would the stork have had something to do with Jim Lamprecht's beard? . . . How are those great white hunters from Plant 15 doing? . . . To all reading this column: We are in desperate need of the bottom of our hole puncher. Please come to our rescue. . . . A thousand pardons to Mr. & Mrs. Al Cooley. We neglected to mention that Allan Jr. was married. . . . What 11 girls escorted Bob Rapp to the Boat Show? . . . Bruce, you never did tell us how you sprained that arm. . . . Sy Licht, how about letting us know which months are rated "A" this year? . . . Ed Miller's new "tee-hee" is when Marie tells him Freddie Zapf is calling. . . . Manny Weinberger is driving us all crazy with his "psycho test." The news of Mrs. Weinberger is that she received a B in psychology to complete her degree. . . . Frank Burgess is walking around with a new addition. Anyone have comments?

### EDP Data Chatta

**by Ernie Low**

George Magnuson back to work after a hospital stay. . . . EDP engagement of the year: Diana Goldecker to Pat DeRosa. . . . The awaited move to the trailers for the Programming staff has started. . . . On the Microfiche viewer the Systems Programming area found a new bug in O.S. (it was alive). . . . Who stumbled into the trash can? . . . What gremlins are programming at night? . . . Ted Cimaszewski passing out cigars for his new son, Steven. . . . Condolences from all of us to Bob Bruhl on the death of his mother, Margaret. . . . Roy Kaefer blew the lamp on his new projector the first time he tried it.

# PLAIN talk

## Disaster discussion

A voluntary scientific group, the Atmosphere Section of the Environmental Technology Seminar, met January 21 in Plant 5 to hear Norm Dvoskin, Operations Analysis/Planning Research, present a survey of natural hazards and natural disaster warning systems. Topics discussed were ways of coping with such phenomena as earthquakes, hurricanes, tornadoes, blizzards, air pollution, and tidal waves. The presentation was part of a broad effort designed to apply aerospace technology to peaceful means. A question and answer period followed which led to a spirited discussion of aspects of environmental pollution.

Persons interested in attending future section meetings should call Richard Carbone, Ext. 1001, or Richard Geller, Ext. 1188.

## Another Wise Owl

Proving that you never know . . .

Bart DiMasi of Plant 4 Facilities Maintenance has his two eyes today because he was wearing safety glasses. DiMasi is shown above (C) accepting a safety citation from Fred Lamude (L), Safety, and Joe Armstrong, Plant 4 manager. While Bart was repairing a motor that moves the hangar door in Plant 4, a piece of metal broke loose from the motor housing and struck his glasses, completely shattering the right lens but doing no damage to his eye. He didn't plan it that way, but he thus became eligible for membership in the Wise Owl Club of America. Most important, he can still see.

It's experiences like this that prompted Vice President Corky Meyer to introduce into Plants 3 and 27, and recently into Plant 1, the directive requiring anyone visiting shop areas to wear eye protection.

## West Coast plant

Olson Bodies, Inc., the aluminum truck body manufacturing subsidiary of Grumman Allied Industries, Inc., is to have a new home 175 miles north of Los Angeles, at Tulare, Calif. Announcement of the new plant was made by Bob Loar, Senior Vice President of Grumman Allied Industries, Garden City.

Work has begun on a building of 74,080 square feet, which is scheduled to be ready to go into production in about five months. The plant will manufacture aluminum truck bodies of the dairy and bakery type with forward-control chassis, and there are plans to produce self-contained motor homes that will sleep six. Olson Bodies, Inc., has other manufacturing plants in Athens, N. Y., Sturgis, Mich., and Sherman, Tex. This is its first venture into the Far West.

## On the air

Radio Station WGBB, 1240 on your dial, broadcasts every Sunday morning at 10:30 a public service type of program called "Viewpoint," and Grumman, being the Island's largest employer, figures frequently in this series.

Dick Dunne of Public Affairs for Space invites Grumman personnel who may be working on interesting Grumman projects, if they are not proprietary, to call him. If the subject appears to be timely and suitable, he will arrange an interview. Dunne's extension, in Plant 25, is 7521.

## Synonymous with success

Dick Imgram, a soft-spoken giant of a fella who is on the Systems Technology staff as assistant to Mike Mohr, was instrumental in starting the Grumman Gophers rifle team at Grumman back in 1956—and his name has been synonymous with their success ever since.

Over these 13 years Grumman's range accomplishments are a "mile long"—including 10 Long Island Industrial League championships.

The Gophers have dug into the records with victories in such competition as the South Shore League, New York Gallery Tournament, Connecticut State, Pan-American Airlines tourney, Cos Cob, Northeast Regional . . . the list goes on, and on, up to two National Industrial Recreation Association titles.

Almost unnoticed, Imgram touched a huge milestone in his career when he competed in his 200th gallery league match for Grumman. He failed, this time, to break into the top five in the victory over DeMott-Carmen in the South Shore match at Uniondale High School—but he shot 188, which is memorable in a sense because that is his Grumman average over the 13 years.

A high-spot in his Grumman shooting was probably in 1958 when he won the Industrial individual honors.

There's little wonder that they call Dick Imgram a straight shooter.

## Flying high

Though it's only a few months old, the Long Island Chapter of the Society of Flight Test Engineers is already flying high. The group lists four new officers, boasts a membership of 60 people, and has many professional and social activities planned for this year.

Serving with President Dick Kenefick are Vice President Frank Higgins and Secretary John Boyajian, all of Flight Acceptance, and Treasurer Dick Hutchins of Grumman Data Systems.

If you are involved in the flight testing of manned aircraft in the areas of flight test, instrumentation, or data processing, and would like more information about the new chapter, why not contact Paul Waisanen, Ext. 57-494. He's ready to welcome you on board.

## Welcome guests

Many people have found that birds are pleasant and interesting guests during the cold months of winter.

To provide for their company, get a bird feeder and keep it filled. Birds soon learn to depend on your generosity and will suffer if their source of food is neglected. Chickadees, titmice, and nuthatches are attracted by sunflower seeds, cardinals and juncos like hemp, millet, and cracked corn, and woodpeckers and other worm eaters go for suet. Many birds will be delighted with sliced apple, dried raisins, or lettuce leaves.

If you provide your guests with clean unfrozen water as well as food they will entertain your family all winter.

## Thank-you note

A whole hospital brightened up because a lot of thoughtful people cared.

In a thank-you to Capt. Andrew Yates, Naval Plant Representative at Grumman, the Commanding Officer of St. Albans Naval Hospital, Capt. G. H. Tarr Jr., has written:

"We are indeed grateful to the members of the Naval Plant Representative Office and the employees of the Grumman Aerospace Corporation for the many Christmas gifts. The four television sets and the two phonographs will be used for the entertainment of our bed-confined patients. Also, the baskets of fruit were distributed to each ward, where they were enthusiastically received. These kind efforts brought the meaning of Christmas much closer to our patients.

"The cooperation of Misses Josephine Grimaldi and Patricia Ward in co-ordinating this project was outstanding, and please convey my appreciation to them. On behalf of the patients at St. Albans I extend to you and the Grumman employees my sincere thanks and appreciation for the gifts received."

Captain Yates has also expressed thanks to Grumman employees and organizations who donated money and individual gifts. He said, "The cooperation which Misses Grimaldi and Ward received from various Grumman divisions contributed greatly to the success of the effort."

## Weekend warrior

Cdr. Dick Reade Jr. has been a "weekend warrior" for so many years he hardly notices the trip from his home in Setauket to Lakehurst, N. J. Even his wife accepts it. Reade joined the Navy in 1942, flew Grumman Avengers during WWII, and has been in the Naval Air Reserve since 1947. During 20 weekends a year and two weeks of active duty, he devotes his energies to Helicopter Air ASW Squadron HS-66N2, of which he is commander. (He took helicopter training in 1956).

The photo shows him with an Aviation Safety Citation—the third such honor his squadron has earned—for maintaining 12 (36 total) months of safe flight operations. At Grumman, Reade works in Plant 15, where he is asst. Flight Test manager on the F-14, "a great plane," in his book.

## New posts

Appointments announced last month include these in Grumman Aerospace: Robert MacLeod to be deputy to H. K. Denton, asst. Program director - LM Support; Marvin J. Percher to Change Control manager, LM, reporting to LM Program Director Ralph Tripp. . . . In Grumman Data Systems, Andrew DePalma is director of Corporate Budgets, reporting to J. M. Pettit, Treasurer.

Photos by
Bob Settles

# CU aims to attract more investors in '70 by upping interest rate

The stock market being what it is—unpredictable—so far this year, a new Credit Union interest rate of 5½% glitters brightly and reassuringly to potential investors. Standing solidly behind the new interest payment are Credit Union assets totaling more than $20 million.

The 5½% dividend rate was announced at the annual meeting of the Bethpage Federal Credit Union held January 29. "At this interest rate," said Bob Giles, re-elected president of the Credit Union, "an investor with $1000 in a Credit Union account can watch the compound interest work to earn him $59.60, or close to 6% if he leaves his money in all year. We'd like to see more savers taking advantage of the increase, as well as of the convenience of payroll savings."

Giles, who works in S/CAT Management, Plant 39, has seen Grumman's Credit Union double in size since he first held office as chairman of the Credit Committee 15 years ago. After that he served as CU treasurer, then vice president, and last year, president. At the annual meeting last month he was returned to the presidency for a second term.

## Continued growth

It has been a year of continued growth. This is how the Credit Union secretary-treasurer, John Fessel, outlined it to members attending the annual meeting in Plant 2 Cafeteria:

"Our assets have increased by approximately $1,200,000 during the year." Then, referring to the annual statement (reproduced in short form here): "Major increases occurred in the following accounts: Under Liabilities: Shares, representing member savings, increased by $770,000; Reserves, derived from income, increased by $430,000.

"The incoming funds,' he continued, "were invested as follows, under Assets: Loans to members (increased by $475,000); Investments (increased by $680,000). The bulk of the remaining amount appears in the increase in our bank balances."

The Certified Public Accounting firm of Hurdman and Cranstoun is employed to audit Credit Union books. Twice a year, Hurdman and Cranstoun accountants drop in, unannounced, to check the records, and Federal examiners make their surprise visit once a year. "Best managed credit union on the eastern seaboard," was the verdict of the Federal examiners the last time they visited Bethpage, Giles reports.

Bethpage Federal Credit Union finances have risen to such proportions that an outside firm is consulted in managing CU investments—although, as Fessel likes to point out, "Credit Union belongs to its members." Under Federal regulations, credit union funds can be invested only in government agency securities. An interest rate of 7½ to 8½% is often available on short-term government issues.

Loans to Credit Union members amounted to over $15 million in 1969. What did the borrowers need the money for, and how much did it cost them? Cars, home improvements, tuition, boats, medical bills, vacations . . . to name a few. For regular loans, Credit Union charges are .85% per month on the unpaid balance, and this can be paid off as fast as the borrower desires. The rate is a true annual rate of 10.2% per year. On loans fully secured by the CU member, through his savings on deposit in the Credit Union, or in other ways, the rate is .75% per month, or 9% per year. As of December 31, 1969, there were 16,500 loans outstanding.

A few years ago the Bethpage Federal Credit Union introduced borrowers' life insurance on all loans up to $3500.

Elected to the Board of Directors at the annual meeting were Bob Giles, John Fessel, George Hennings, Thomas Gill, and Cecil Davis. Gus Nyberg, John Kost, Miles Jacobson, and Joe Milillo continued on the Board.

Following the annual meeting, the Board elected Giles president, Nyberg, Kost, and Jacobson vice presidents, Fessel secretary-treasurer, and Hennings chairman of the Executive Committee.

Members of the Credit Committee re-elected were Davis, chairman; Art Westerfeld, secretary, and Bernard Smith. Continuing their terms on the Committee were William Henkel, loan officer, and Jim Roberts. Isabelle Gagnon and John Slocum of the Credit Union serve on the Committee as loan officers also.

Freeman Barnes, chairman, and Charles Buxton and Howard Dunn make up the Supervisory Committee.

Application forms for Credit Union membership are available in all plants, either at Employee Services Offices or administrative offices, and from the Credit Union building adjoining Plant 2.

## BETHPAGE AIRCRAFT FEDERAL CREDIT UNION
### Statement of Condition

| | 1968 | 1969 |
|---|---|---|
| **ASSETS** | | |
| Loans | $ 14,899,848.35 | $ 15,374,719.85 |
| Cash on Hand and in Bank | 518,167.79 | 559,679.97 |
| Government Agency Bonds | 297,600.00 | 4,388,843.75 |
| Accrued Interest on Bonds Purchased | - 0 - | 19,768.14 |
| Savings and Loan Certificates | 2,685,125.00 | 15,000.00 |
| Certificate of Deposit | 850,000.00 | - 0 - |
| Furniture and Fixtures | 7,371.50 | 6,447.50 |
| Prepaid Insurance | 1,851.50 | 680.25 |
| Other Assets | 1,707.85 | 2,615.63 |
| Building Alterations | 13,483.16 | 11,409.88 |
| Earned Interest Accrued | - 0 - | 88,970.51 |
| Deferred Expense | - 0 - | 2,171.00 |
| | 19,275,155.15 | 20,470,306.48 |
| **LIABILITIES** | | |
| Accounts Payable | 6,048.68 | 4,505.95 |
| Shares | 17,214,912.53 | 17,986,097.77 |
| Regular Reserve | 1,110,405.54 | 1,277,510.73 |
| Undivided Earnings | 619,925.90 | 752,208.03 |
| Reserve for Contingencies | 300,000.00 | 400,000.00 |
| Reserve for Contingencies - Pension | - 0 - | 32,634.00 |
| Accrued Liabilities | 23,862.50 | 17,350.00 |
| | 19,275,155.15 | 20,470,306.48 |
| **INCOME** | | |
| Interest on Loans | 1,333,053.17 | 1,490,809.98 |
| Income from Investments | 178,183.99 | 221,932.61 |
| Gain on Sale of Bonds | - 0 - | 4,273.61 |
| Gross Income | 1,511,237.16 | 1,717,016.20 |
| Less Expense | 367,528.99 | 408,706.25 |
| Net Income | 1,143,708.17 | 1,308,309.95 |
| 20% to Regular Reserve | 228,741.63 | 261,662.00 |
| Total | 914,966.54 | 1,046,647.95 |
| Less Dividends | 760,553.52 | 804,300.45 |
| Net to Undivided Earnings | 154,413.02 | 242,347.50 |

# in the SLIPSTREAM

## Warehouse Wit

**by Gerald Mason & Linda Kost**

Walter Lubbe a great flat fixer while Teddy Loizides, Ron Bernardis, and Tony Valetutti offer their encouragement. . . . There is a newly formed Tuesday bowling team, co-ed style. Any new members greatly appreciated. . . . We wish to thank all our friends in helping us on our annual St. Mary's of the Angels Home drawing. Once again it was a huge success and the nuns at the home were overwhelmed at our contribution. . . . All the fellows preparing for the table tennis tournament which starts soon. Seen Tony Valetutti for details. . . . The Christmas decorations in Nick Cozza's group, Section K, are still remembered with delight. . . . The best to Barbara Johnson and Pat Catalanotto, who were transferred to Plant 30. . . . Condolences to Al Squicciarini on the death of his father, and to Clay Sheppard on the death of his mother. . . . We are all sending our get-well wishes to Al Schuckle of Procurement Planning and to Ruth Howard of the Traffic Department.

## The 8 Balls

**by Ella Long**

The Art McGuires are the proud parents of a baby daughter. . . . Ray Cutter leaving to be a full-time college student. Loads of luck, Ray. . . . John Peper and John Bielins both ordered new cars. The tug of war between the prices was great fun. . . . From the looks of everyone's dirty automobiles, what we need out here in the boondocks is a good car wash. . . . Holidays are over and Dick Benedict hasn't lost any weight yet. . . . Our boys are watching the rabbits, deer, and pheasants inside the GAC fence and eating their hearts out. Leave your guns at home, fellas. . . . Ted Gronager finally got his puddle jumper working. . . . Dominick Carroll misses his side kick, Ed Collins. . . . Paul Shadlich with a mustache looks very, very British. . . . Hugh Wallace, they tell me you're getting a little chubby. . . . Nice to see Marty Mallow visiting us on his return from his honeymoon and displaying a nice shiny wedding band. . . . Norma Bettancourt shopping for furniture. The wedding will be this year. . . . Ron Dykeman very happy these days. Why, Ron? . . . Jim Wendt anxious to get his boat in the water and winter is still here. . . . John Lang admits to putting on a little weight. . . . Gerri Ribeiro stopped in to see us before going back to Phoenix with her husband, Warren Knouff. He is an ex-GAC, now a lieutenant in the Air Force. They look great. . . . We received a letter of "Thanks for Job Well Done" from Don Wallace. . . . Claus Von Glahn zipping in and out of traffic with his little yellow bug. . . . Why does the Xerox machine always break down for Al Gordon? . . . Marie Downs claims, "Blondes do have more fun." (Personally, I disagree.) . . . The fellows all look great with their colored shirts and striped ties. Where are the trumpet pants, men?

## Contracts Clamor

**by Gloria Becker**

Well, gang, this is my final column on your behalf, as I shall be moving to Manufacturing Engineering in Plant 2. I'm happy to announce that Charlie Solomon is my successor and you can reach him on Ext. 9577. Be good groups, and let him have all the current news. . . . Before I say my final farewell, on with this month's "clamor." . . . A hearty welcome back to Priscilla Conpino. . . . Sincere condolences from all of us to Susan Hartmann on the loss of her mother. . . . New Grandparents Dept.: Bob and Cathy Coutieri, a girl (Caryl Lee), born in Hawaii (from Alaska to Hawaii—that's really traveling), and Bill and Peg Burch, a girl (Catherine) via son Preston and wife down at Goddard. . . . Wishes for a speedy recovery to old friend Jack Meany at KSC, Bertha Wilson (Sid's wife), and Joyce Ure (Al's wife). . . . Ray Henderson informs us that he's no longer hobbling on crutches—now he's using a cane. . . . John and Kay Engel are parents of a new son, John Jr. . . . Charlie Solomon beaming since told of his son's passing the bar exam. . . . Bob Zummo now located with Subcontract Sales. . . . Wayne Winokur: What have you done to your car? Are you sure all the pieces will go together again? Well, there's always the new car market. . . . The flu bug has hit again, making a vertible sea of empty desks.

## Tab Run

**by Robert Semprini**

Congratulations to C. Murphy on his engagement to Jeanne Noebels, Requirements Planning. The wedding day is to be on May 23. . . . Everyone in Requirements Planning and Inventory Control wishes Al Schuckle a speedy recovery from his recent operation. . . . Bob Ruotolo shook up the Classified Bowling League by rolling a PERFECT 300 game. . . . Glad to see Tom Kelly back after his long illness. . . . Joe "D" Dragotta now working out of Point Mugu, Calif., and everyone wishes him well. . . . Bob Schlosser bought a new tape recorder and a new Buick to plug it into. . . . Who bought a dachshund puppy that looks like a St. Bernard? . . . Ed Wilcox says, "The circus is not in town." . . . I hear that you'll never find Gerry Altmann without a song. . . . Ed Danels moved closer to the bowling alley. . . . The Ted Johnson and Arty Norelius families preparing for their February Switzerland vacations. . . . Inventory Control also has an "Oliver," Marge Oliver, who keeps our files up to date. Welcome, Marge. . . . Blanche Oakes' daughter became Mrs. Thomas Wojnarowski. . . . Welcome mat out for Ralph Salerno, Nelson Simpson, and Joe Stalzer. . . . Bob and Deborah Hower married on January 24. . . . Irv Wiggins, Dutch Giesemann, and Bob Semprini received their Project Sterling pins. . . . The John Hoars purchased a house in Deer Park. . . . Chick Robb and Charlie Bochicchio did away with their crewcuts and purchased a comb.

## Cue See Tee Ess

**by Agnes Bandhold**

Kurt Steitz and his b. w. the proud parents of a baby girl named Joyce. . . . Is Agnes "Green Thumb" Sorrell in line for the Horticulture Award of the Year? She just discovered watering does not make artificial flowers grow. . . . Joe Goldzung received his 20-year pin this month. . . . Lynn Metcalf back from Florida wearing a tan. . . . Sincere condolences to Tom Fox on the loss of his mother, to Pris Koenig on the loss of her grandfather, and Frank Sammon on the loss of his father-in-law. . . . Louise Tooker returned from Europe after attending her son's wedding in Germany and doing some sightseeing. . . . Has anyone noticed a resemblance between Burl Ives and Werner Ettlinger? (He says he is playing two strings on the guitar now.) . . . Your new Slipstream reporter will be Lillian Gorlitz, QC Tech Services. I'm moving to Calibration Management, Plant 12. Call Lillian on Ext. 7205 or 86003 with any news.

## Product Support

**by Kay Danza**

Ginny and Roy Fleming had a wonderful weekend visiting Roy's folks in Nashville, Tenn. . . . Dick Seiler became a young great-grandfather recently at age 55. . . . Pat Murana shot a fabulous "6 gold" at 20 yards in an archery tournament. . . . Best wishes, Roy Kudrzycki and Barbara Tomasino, on your engagement. . . . We will all miss Charlie Snugg; his passing was quite a shock to us all. . . . I wonder what Ed Dalva did with the extra parts he had left over after he put his mini-bike together. Maybe the problem was that he could not read the Japanese book of instructions that came with it. . . . Mr. & Mrs. Joseph Sheery just returned from a wonderful vacation in Nassau. . . . Vi Pratesi and her husband are celebrating their 22nd wedding anniversary with a Caribbean cruise aboard the Queen Elizabeth II. It says here there are 13 bars on the boat. . . . Ron King is the owner of a new 25-inch color TV that he won as the second prize in the Grumman United Fund drawing. . . . After Jack Yuncker's cataract operation, we know he'll be anxious to get back, since he'll be able to see the girls better. . . . From the LM Pubs area: Russ Gazdag was awarded the Silver Snoopy award for outstanding contributions to LM Pubs. Award was made personally by Gordon Cooper and Doc Tripp. . . . New fathers, each with a boy, are Jim Murphy and Roger Yackel. . . . Herman Rigby seems to be having a little difficulty explaining to everyone just how he broke his toe. . . . Everyone had a good time at the post-nuptial party held for Mr. & Mrs. Ray Doll. . . . Fred Benson graced us with his presence over the Christmas holidays before returning to the land of Nippon. . . . There was a little excitement the other day when Josh Heisman's wastebasket caught fire and Josh put it out by turning it upside down. Except for a couple of sizzled fingers, there was no damage. How it got started, nobody knows. . . . Kris Jenks became engaged over the holidays and a May wedding is planned. . . . Mrs. Al Calucci is coming along nicely after a long bout with pneumonia.

## Facilities

**by Venus Vasilakos**

The Stan Andersons traveled to New Mexico to attend son Don's wedding. . . . Bob Yezek and Joe Candek came back from their Florida vacations with some very nice tans. Also Bill Hottinger, who was stranded (ha-ha) on the Virgin Islands. . . . The John Masons receiving congratulations on the birth of their first, a boy, and the Dan Blazejewskis on the birth of their second son. . . . Good to see Sal Carrera back from his sick leave. . . . Hello to Bill Brynda, still out sick. . . . Happy 25-years-married to the Vinnie Gonzalez'. . . . Welcome back to Mac McCown. . . . Tony Quinn acquired his Professional Engineer's license. . . . The three new girls in the department turned out to be Noreen Nilson with three different hairdos. . . . Happy first wedding anniversary to Barbara and Tony Castellano. . . . Pete Harry and Ed Stastny doing very well with their calorie-counting. . . . Barbara Avino hopes Howie Harleston gets over his loss of memory soon. . . . Jack Tonkinson very proudly showing pictures of his granddaughter. . . . Good luck to all at their new posts. . . . Ronnie Martinell has terminated to await the arrival of her baby.

# OBITUARIES

**Plane News has received word that death has come to the Grumman personnel listed below. We extend sincere sympathy to relatives and friends.**

ANTONIO D'ERRICO, who had been with the Company since 1940, died January 26. He was 62 years old and had worked in Prototype, Plant 1. His home was at 938 118 St., College Point.

ALAN N. EISEN of Grumman Data Systems, Plant 35, died January 29 at the age of 35. He had been with Grumman three years. He lived at 11 Eastfield La., Huntington Station.

JOHN MATLAK of Facilities Maintenance, Plant 6, died January 29, aged 55. He had been with the Company four years, and he lived at 41 Forge Rd., Riverhead.

RICHARD L. WOODRUFF of QC Quality Enginering, Plant 36, died February 2. He was 55 years old and had been with the Company since 1964. His home was at 25 Erlwein Ct., Amityville.

ROBERT C. BEHAN of Structural Designers, Plant 25, died February 4 at the age of 23. He had been with Grumman almost a year. He lived at 6 Woodchuck Ct., East Setauket.

WILLIAM E. PHILLIPS died February 4. He had worked in Distribution Services, Plant 6, and had been with the Company since 1946. He lived on East Tiana Rd., Hampton Bays.

HILBRANDT A. TEMPLE of Plant Protection, Plant 77, Stuart, died February 5. He was 59 and had been with Grumman since 1968. He lived at 363 Rio Blvd., Jensen Beach, Fla.

# Governor at Cape

Just before year's end, Florida Governor Claude R. Kirk Jr. (2nd R) visited Cocoa Beach to present a safety award to the Grumman team at Kennedy Space Center. Governor Kirk is shown at the presentation with George Skurla (2nd L), Grumman manager of Operations at the Cape, State Senator Beth Johnson, and Jack Andrews, director of Safety for Grumman at KSC. Although much of the work performed by Grumman people at KSC is hazardous, they accumulated over 2½ million accident-free manhours since January 1969. Before that, Grummanites at the Cape amassed over three million manhours without an accident from November 1967 to early January 1969.

# Anniversary roster . . .

*(Continued from page 6)*

One woman and 30 men comprise the 15-year roster:

**PLANT 1:** William G. Swamback, Final Assembly; Amedo A. Missale, Tool Fabrication - Jigs & Fixtures; Richard J. Stubbe, Mechanisms; Mario C. Lombardo, Structural Analysis.

**PLANT 2:** Warren Strong, Industrial Engineering - Factory Planning; Rudolph Zotter, Tool Fabrication - Jigs & Fixtures; Alfred Muller, Manufacturing Tech. - Assembly by Tooling; Alexander B. Paterson and Samuel Merra, Facilities Maintenance; Stanley Hajek, Presentations Services.

**PLANT 3:** Edward J. O'Donnell, Wing Final Assembly.

**PLANT 5:** William J. Morley, Static Test; Mercedes W. Rogozenski, Contracts Aircraft.

**PLANT 6:** Daniel P. Grattan, Power Plant; Frank Lucas, Avionics Installation; Richard H. Boehning, P/S Engineering Services Management; Robert Luckingham, Manufacturing Inspection; Joseph G. Powell, Receiving Inspection - General.

**PLANT 7:** Robert K. Smyth, FAD Management; Frederick J. Taylor, Airport Operations.

**PLANT 13:** Lee H. Stacey, Facilities Maintenance.

**PLANT 22:** William F. Kiesel IV, Fluid Power.

**PLANT 25:** Salvatore C. Salina, Advanced Space Systems.

**PLANT 30:** Vincent J. Tancredi, P/S Provisioning Requirements; Theodore A. Jensen, Corporate Budgets.

**PLANT 32:** Robert W. Butts, Shop Control.

**PLANT 35:** Charles A. Farell, Mechanical Systems; Louis G. Kaufman II, Fluid Mechanics.

**PLANT 83:** Osborne Singer, KSC Administration; Willis D. Carpenter Jr., KSC Quality Control; Richard V. Lambert, KSC Logistics.

E. A. Schneider
Flight Avionics

S. Klein
P/S Prog. Supp.

H. C. Koraleski
Final Assem.

A. I. Robertson
Proj. Admin.

W. H. Bedell
Flight Crews

(Anniversary photos by Nat Scherer)

## Hoop game on tap

A basketball triple-header is coming up Sunday, March 1, at the Long Island Garden in West Hempstead.

Sponsored by the Suffolk Wheelchair Athletic Association, the event will feature:

A preliminary game to start at noon,

The New York Nets vs the Dallas Chaparrals at 2 p.m.,

An Eastern Wheelchair League game, the Eastern Paralyzed Veterans Association Chargers vs the Brooklyn Whirlaways.

Tickets cost $3 each and the proceeds will go to the SWAA and the PVA. Tickets are available by mail from the SWAA, 19 Woodchuck Lane, East Setauket. For information call David Levy, 473-2800 Ext. 288 days, or 473-1744 evenings.

## Helping hands

A while back, Dinny Gagnon, Chief Inspector in Quality Control, crossed paths with Joey Massero, an 18-year old Babylon youngster who had been a Little League star until he was sidelined by an illness that made him blind some years ago. Joey was campaigning to get baseball gloves in the Babylon Rotary drive to aid Rev. Lawrence Connors, a Maryknoll missionary in Taiwan. Father Lawrence, who had been raised in nearby Lindenhurst, had written to the Kiwanis of his problem: he was trying to organize a Little League in Taiwan, but was unable to secure enough equipment.

Dinny was immediately taken by young Joey's efforts, and offered help. He swung into action at Grumman and enlisted the aid of Larry Gagliano, Russell DePuy and Al Roscano, all on his Quality Control staff. This trio scoured Bethpage plants, and although they are all "Knight Owls" their requests were heard far and wide.

Recently, Dinny delivered 200 gloves to Joey Massero . . . and there was a delighted boy. Not only had they won the battle of Taiwan, but Joey received several gifts as the chief contributor in the Rotary drive.

One perplexing item, however: Jammed in the collection of 200 gloves provided by Dinny and his aides was one set of boxing gloves.

"Must be for the umpire," muttered Gagnon.

## Memorial Science Fair

The first William B. Bunker Memorial Science Fair, with an aeronautics theme, is presently in the planning stage for April 1970, Lt. Col. Dean Wright, chairman, has announced. He is assigned to the U.S. Army Utility Aircraft Project Manager's Office in St. Louis.

The fair is expected to be an annual event and a memorial to the late Lt. Gen. William B. Bunker, formerly Army Materiel Command deputy commander.

Many Grumman people, especially those associated with the Mohawk Program, knew General Bunker when he was in the Army Materiel Command in Washington, D. C. In August 1966, General Bunker visited Plant 77 to speak at ceremonies marking the first modified OV-1 Mohawk to come off the production line at the Stuart, Fla., facility.

Junior and senior high school youngsters who are dependents of members of participating organizations will be eligible to enter the fair, which is planned for the Federal (Mart) Building.

These organizations include: Army Aviation Systems Command, which Gen. Bunker commanded for nearly seven years; the Lindbergh Chapter Army Aviation Association of America, and Army Aviation Chapter No. 54, Armed Forces Management Association, both founded in St. Louis by General Bunker, who later served as national president of the latter association.

Other organizations sponsoring the fair include local chapters or sections of the Association of the United States Army, the American Helicopter Association, American Institute of Aeronautics and Astronautics, and the Missouri Society of Professional Engineers.

Serving on the steering committee with Colonel Wright are: Dean Stravato, Bell Helicopter Company, who is Army Aviation Association coordinator; Larry Franzoi of the Project Manager's office, and Dave Sevier, AVSCOM.

Inquiries on the Science Fair should be directed to the U. S. Army Aviation Systems Command, Twelfth and Spruce Streets, St. Louis, Missouri, 63103.

## Once again

There! He's done it again. Plaudits continue to come from almost anywhere Grumman photographer Fred Annette goes. Example:

"We are very thankful for the color aerial photograph of the University of Alaska campus . . .

"We have taken some aerials of our own over the years but have never been able to capture the campus as beautifully as Mr. Annette has been able to do.

"We plan to use this picture on the cover of our 1970-71 catalog."

That letter, addressed to Doug Hill of Operations Analysis, Product Development, Plant 5, was signed by William R. Wood, President.

# Weihs hits Monday pin jackpot; makes bells ring with 268-661

Some fancy antics in the Monday Mixed League eased Sid Weihs' disappointment in the varsity bowling tryouts. Actually, Weihs performed smartly in the trials with a 186 average for 24 games, but at the final cut he was 110 pins shy of the 10th spot, the last position on the company squad. But Weihs had himself a walloping night in the Monday churning, cracking both men's records with neon-lighted scores of 268 and 661, both top Grumman efforts reported over the past two weeks. His series tally was 28 sticks over his own loop mark, while the 268 erased the Monday mark of 246, which had been held jointly by Ernie Neves and Jim Taylor. Bob Toye also did some solid pin-mauling with a 620 series highlighting a 232, while loop secretary June Becher led the girls a merry chase with a 477 string. . . . A late report via telephone credited Bill Diercks with a record 258 in the Syosset Mixed circuit, erasing John Betterino's 248. Diercks went on to a 658 series, well short of Betterino's record 679. In an earlier round Diercks had a high 235, with John Quelly leading the series field at 595. Marie Wood's 198 and 503 by Terry Bernard carried the distaff honors. Stan Nilsen was a big Syosset gun in previous firing, cracking a 245-603, while Monica Wojtyniak swept the femmes with 211-562. Hal Shoppman rolled a 231 for the Misfits. . . . John Betterino is a busy pitcher, being prominent also in the Black League (Grumman's oldest) with a 190 average for the top-ranking Mixers. He chucked scores of 236-614 when Ernie Neves tattooed the wood for 210-609. Earlier, Fred Wagenhauser slid into the spotlight with 234-608 while oldtimer Vic Matuza was streaking to a 590 series after a 222. Tony Klobukowski had games of 203 and 229, but finished up with only 565.

### It's a Masters stroke—and a team record

The boys in the Masters league, who have done a lot of drumbeating this year, need only to point to the record—eight out of the ten finalists in the varsity tryouts wear the Masters's emblem, and this included Jack Nielsen who took over first place in the league's individual competition. He held a slim edge last week over Joe Wilson, with former pacesetter Cliff Hartnack slipping to third place, while the combination of Nilsen, Zolek, and Hilbert, rolling as the Sebs, racked up a new team series mark of 2387 for their four games. Ken Gutekunst cracked the night's top game of 242 and Johnny Alston rolled 848 for his four, but the attention was riveted on the match between Dick Suttmeier and Ed Hilbert. Suttmeier swept all four games, averaging over 209, but the total-pin difference was only 10 at the finish. Previously, Mike Greggo led the parade with an 810 string and Ed Riley barely squeezed game honors on a 234, nipping Ed Gabriel and Suttmeier by only a pin, and Bob Herz by two.

### Bearcat marks just escape Veprek splurge

Lou Veprek rolled the second highest scores of the campaign in Bearcat play, hitting 254 and 655. He also rolled 233 in the series, which was 14 sticks under Ron Cerreta's record. Cerreta also holds high game of 256. Al Van Heuvel reached the magic circle that night with 603, while later Al Haupt rolled 230-602 and Mike Smith shot 233. Top scores later were John Benz' 233-588. . . . Dea Auguston's 209 paced the girls at Patchogue, along with Maggie Gaynor's 542, while in the men's bracket the leaders were George Landin at 220 and Dick Lindstrom's 592 total. . . . The Supers were superlative in Lunar looping, sweeping both team records off the books with scores of 779 and 2165. Teammates also nabbed individual honors for the night, with Tom Haller rolling 218 and John Schlowsky adding up to 548. . . . Bill Gallagher now holds the Outpost game record of 253, adding to his series mark of 642. Last week Gallagher rolled 605 and Joe Avanzato shot 233, sharing this high with Frank Fox. . . . The Misfits shattered the team series mark in Trader tossing, rolling 2954, while individual bouquets went to John Stecker's 240 and a 616 by Bill Soltan. Later, Soltan had high game at 231, and Frank Nelson had the best total, 595. . . . Fred Kuehne picked up the marbles in Aerospace kegling with 576 after a 222 game, which John Dudonis nicked by a stick. Tony Missale hit 569. Earlier, George Lomot topped the list at 584, with game honors going to Ed Moran for 223 in a 577 string. . . . Lennie Scaturro sizzled in the Nite Owl loop with a booming 253 in a 638 series, as Louie Leftenant rolled 235 and Clay Wiley 234. Wiley shone, too, in an earlier round with a 235, as Harry Haase had a sharp line of 233, 201 and 202 for 626, topping Rudy Dunkley's 609.

### Skirde turns on heat in Red loop firing

Sharpshooter Fred Skirde stirred up a lot of alley dust in the Red league, first whacking out a 650 series on games of 231-226, then dashing back last week to sweep honors on 247-595. Joe Vosefski hit 236, while Al Weiskopf was rolling 622, Bob Pfaltz, 609, and Ben Steinberg was exploding a 256 firecracker in a 620 show. Pfaltz started off with a 244. . . . Ed Weeks kept things sizzling in the Classified play, socking a 253 last week and adding a 214 for 649. Frank Azzarella clicked off a 615 series, and during the previous round Art Mahlstedt stepped to the head of the parade by knocking out a 256 in a 611 total. Don Otten was consistant with 606 and Zarella was again in the elite circle with 605, lifted by a 223. Charlie Catalano grabbed a speck of the spotlight, too, rolling in on a 245 game. . . . Don Callahan's 264 and 635 series by Bill Foote brightened up the Gray. Callahan missed Mark Mellinger's loop record by a pin, but had some solace in a 612 tally. Foote clanged games of 245 and 214 in his 635, while Dick Fink rambled in high gear, shooting a 252 game and adding up to 587. . . . Tom Cava was the whole show in the Hawkeye Mixed, missing by only one stick of matching Vin DeVito's record as he rolled a 256. He swept honors by going on to a 626 series.

**Sid Weihs**
*Hits high note in pin area*

# Pistol packers sharp shooters

Grumman gunners are drawing beads on titles in both the L.I. Industrial and South Shore circuits, and may hit the target in both the pistol and rifle divisions.

In rifle fire, the Gophers lifted their streak to 12 matches by defeating Brookhaven Lab, 764-736, in an Industrial contest at the Patchogue Armory. This was the fifth Industrial win for the Gophers, who had previously posted seven decisions in the South Shore loop. Al Burns and Dick Imgram led Grumman with 193's, Joe Anckner shot 191, and Bob Lang posted 187.

The big surprise, however, has been the Grumman center fire team in the South Shore pistol league. Shooting in only its second year of competition, this unit has registered six straight victories and has posted scores over the 1000 mark in its last four matches. The center fire boys hit their best mark in their latest test, defeating Tackapausha, 1036-798. Al Berka, one of the Island's top shooters who has bolstered the Grumman team considerably, paced the victory with a 278 aggregate. Ed Moles shot 249, and Fred Wicks and John Crawford stepped up to new personal records and made the win one-sided. Wicks' 267 was 23 points over his average, and Crawford was 22 over his norm with 242.

The center fire team previously defeated Levittown, 1029-703; XRAC by 1014-938; Massaqequa, 1023-838; Brentwood, 993-834; and the Buckskins, 985-910. Bill May and Tom Mugavero were also prominent in this string of Grumman victories in the .38 calibre firing.

## Cue clicker

Tony Vaccaro of Manufacturing Engineering and George Papini of Product Engineering have taken the early lead in the 10-team doubles billiards league being staged by the GAA at the House of Lords in Hicksville. They have amassed 373 points in two rounds.

# Spoilers breeze into cage finals

Unbeaten and unextended, the Spoilers were the first to hit the tape in Grumman's Wednesday night basketball league, and have been seeded into the playoff finals. Ray Schaefer's quintet made sure of that last week when it cracked Cold Flow, 110-75, at Bethpage, for its 7th straight victory.

The Spoilers were bumped towards the playoff spot by the Intrepeds, who ended the Instrumets first-place hopes with a 96-66 romp that was sparked by Bob Scully's 39 points and 22 by Tony Razziano. This was the second loss in seven starts for the Instrumets.

Bil Diercks led the Spoilers in the win over Cold Flow with 24 points, while Ron Bartlett tallied 21. Ken Sullivan hit for 18 and Lee Gendron, Bill Rathje, and Jim Carruthers were all in double figures as they rolled into a 25-point lead at halftime. Pat Garahan netted 31 for Cold Flow.

Brian Berke led the way in an earlier Spoiler win, 111-70, over the Intrepeds. Berke, a flashy southpaw clicked for 24, Gendron netted 21, and Bartlett added 20 as they overpowered the Intrepeds defense. John Ebron's 18 led the losers, while Scully had 16. Previously, Jim Cruthers stepped into the high-scoring act and teamed with Sullivan, Diercks, and Berke as they outclassed the Rejects, 80-61.

### Instrumets click

Before yielding to the Intrepeds, the Instrumets had kept their first-place hopes alive by rallying after the first quarter to notch an 84-67 triumph over the Rejects. Roger Matthews sparked the drive with 23 points and George Henderson netted 15. Al Martorano and Al Beck both had 14 for the Rejects.

Some sizzling action developed in the Tuesday league, with the New Comers and Collegians staging a real donneybrook, and Transportation continuing its climb by staggering the Collegians, 110-76, as Brian Berke swung in 42 tallies. The win, which put Transportation in a tie for second place, was highlighted by Ted Bond's 21-point effort.

The New Comers dominated the play, however, in their struggle at the top with a 6-0 record. They had little trouble belting winless Research by 97-56 as Ed Krol and Lee Gendron tapped in 29 apiece.

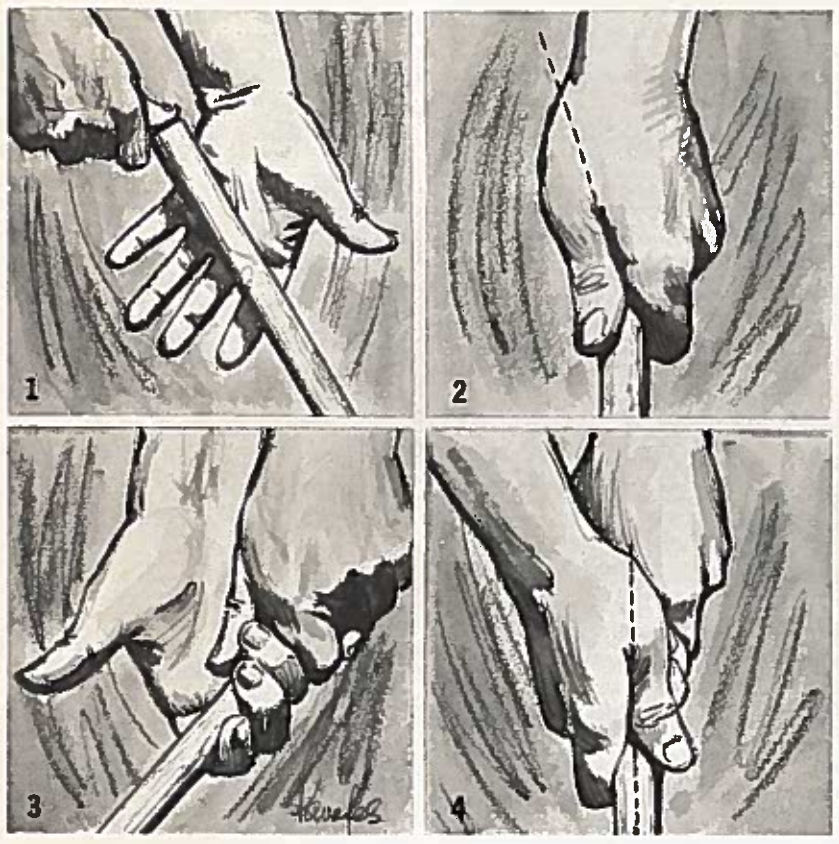
### Krol wins game

Earlier, however, the New Comers just did hold on to an 85-83 squeaker over the Collegians in the season's best game that was decided on Ed Krol's jump shot with less than 10 seconds to go. Krol finished with 24 points, but teammate Frank Quarto pushed the New Comers with 28.

The Collegians started the sizzler by racing into a 12-point lead and controlling the boards in the first quarter. But the New Comers started to peck away from outside and trailed by only four at the intermission. It was seesaw throughout the second half with the Collegians knotting it with 36 seconds on the clock. The New Comers then froze the ball and twice called time. At the 10-second mark Krol grabbed Bob Mischo's pass and sunk the clincher.

Golf guides

# Good grip will stop gripes




*This series of golf hints is being offered by Mike Cherry of the GAA, who is a member of the Professional Golfers Association (PGA). Illustrations are by Craig Kavafes of Presentations Services.*

Getting the proper grip is one of the most important steps in learning how to play golf. A good grip permits the hands and wrists to work together smoothly as one unit. The Vardon overlapping grip, the one I favor, has proven most popular among golf professionals. Other variations are the baseball 10-finger grip and the interlocking grip.

1. Put the grip of your club diagonally across the palm of the left hand just above the callus pad.

2. In folding the left hand around the club, your left thumb should be slightly on the right side of the shaft, and looking down, you should be able to see the first three knuckles. In gripping the club with the left palm, there is more pressure applied with the last three fingers than with index finger and thumb.

3. The right hand grip is definitely a finger grip. The club lies diagonally across the fingers of the right hand below the callus pad. When you fold the right hand over the club grip correctly, a cup will be formed in the palm of the right hand that will provide space enough for the left thumb. The right thumb should rest slightly on the left side of the shaft and not on top.

4. The hands now should be molded as one so that they can act as a single unit. Make sure that the right hand rides on the left hand, the little finger of the right hand is hooked in back of the knuckle of the left index finger, and the greatest pressure in the right hand is applied by the two middle fingers. This grip may feel somewhat awkward at first, but with continued practice it will soon feel more natural. Work to perfect your basic grip—that is what will help assure accuracy and, eventually, lower scores.

# Alston, Crevoiserat head team for Grumman Industrial pin bid

Grumman has stamped its entry in the annual Industrial tourney this season with a starting combination headed by Johnny Alston, a slick slinger from Plant 36 who avceraged 202 for 27 games in the men's eliminations and knocked down 375 more sticks than he did while finishing fourth in 1969.

Alston led from start to finish in the varsity tryouts, rolling a comfortable 159 pins in front of Vin Crevoiserat, who had trouble with his spares in the final three games. Alston rolled 575 in the closeout series as the pace eased considerably, and finished with 5453. Crevoiserat hit 530 for 5294.

Joining Alston and Crevoiserat on the starting team for the Industrial classic will be Ben Plawski, Ken Gutekunst and Jack Nielsen. The first five finishers in the trials have traditionally been Grumman tournament starters. All ten of the finalists, including Ed Hilbert, Walter Matuza, Mike Greggo, Mike Internicola and Grover Hart, will carry Grumman colors in the Sperry Jamboree slated February 28. Ten men and ten women represent company teams in this three-game event.

The men's Industrial event starts at Mid Isle Lanes, Hempstead, on March 7, and stretches over 12 games and four Saturday nights of competition.

Gutekunst did the best bowling in the finals with a 619 series, while Hilbert finished with a 234 for 581, but still trailed fifth-placer Nielsen by 79 sticks.

### Hilbert rolls 1252

In the fourth round, bowled over the six-game route, Hilbert came up with the best performance, rolling 1252 with a 231 to climb into sixth spot. Nielsen also averaged over 200 in this session, rolling 1207 with the help of a 243. Hank Miller's 233, and Bruce Karen's 236 were other features of the round, but both failed to escape the final cut after 24 games, ranking 11th and 12th, respectively.

Alston and Crevoiserat were on the starting Grumman team last year when Long Island Lighting walked off with the championship in the Industrial tourney. Grover Hart was also on the 1969 squad, having finished 7th in the tryouts. This time he rolled 36 pins over his last year's tally, but finished 10th. More than 80 keglers started.

| | | | |
|---|---|---|---|
| John Alston | 5454 | Ed Hilbert | 5185 |
| Vin Crevoiserat | 5294 | Walter Matuza | 5167 |
| Ben Plawski | 5284 | Mike Greggo | 5146 |
| Ken Gutekunst | 5275 | Mike Internicola | 5114 |
| Jack Nielsen | 5264 | Grover Hart | 5066 |

## Frey high

Norma Frey of Repro, in Calverton, is making a long trip to Hempstead on Saturday nights pay off with a spot on the women's varsity bowling team.

Last season she finished fourth in the tryouts and was a member of the squad that went on to win the Industrial title. Norma revved her pace considerably this year and after 12 games breezed along at top of the tryout field with a lead of 157 pins. In the third four-game round she clicked off scores of 219, 226 and 202 and totalled 796 despite a 149 in the second line. The week previously she took over the lead with a whooping 801 series that featured a 247. She averaged over 188 for a 1267 tally.

The field was cut to 10 bowlers after 12 games, and ranking second was Sandra Ritz, who closed out her set at Mid Isle with a flourishing 247 for 738 and an aggregate of 2110.

# Laurino bowls 254 in Nite Owl trials

Alex Klimenko of Plant 33 gained the lead in the opening round of the Nite Owl varsity bowling tryouts with a 597 series, but Ralph Laurino of Plant 5 gained attention as he started the action at Mid Isle Lanes with a booming 254 game. Laurino slipped badly after the big opener, rolling 136 and 156 to finish with 546 in eighth position.

Klimenko, in gaining a 15-pin lead over Judge Locke, rolled games of 213, 184, and 200. Locke started slowly with 167, but then cracked scores of 206 and 209 to finish with 582.

Edwin Martin started with 215 and totalled 564, while ranking only one pin behind him were Bill Buchanan and Ernie Jenkins.

Rounding out the top ten after the opening round were Rudy Dunkley, 552; Laurino; Hank Kwiatkowski, 538; and Tom Iovine, 531.

# Billiards tourney slated February 26

The "big break" comes soon for some of Grumman's indoor athletes as the GAA rolls out the carpet for the 8th annual pocket billiards tournament. Competition will be staged on Thursday nights after working hours in the House of Lords, situated at the corner of South Oyster Bay Road and Old Country Road, Hicksville.

Entry deadline for the event is Friday, February 20, and the accompanying registration form is to be submitted to the GAA in Plant 28B. Mike Cherry is supervising the tourney; he may be reached on Ext. 2269 or 2133.

Tournament play opens February 26, and the preliminary competition will consist of 75 points for game and the eliminations conducted on a one-loss-and-out system. When the field is reduced to eight, play will be double elimination, with a game consisting of 100 points.

George Massey of Production Control, Plant 36, will be back to defend the title he won twice before. Massey won the championship in 1964 and 1969.

## Billiards Tourney Entry

Name ..... Ext. .....

Perm. No. ..... Dept. ..... Plant .....

Forward to GAA Office, Plant 28B, Bethpage

**Entry deadline - Friday, February 20, 1970**

## Ride Wanted

**DEER PARK:** Vic. Grand Blvd. & 7th St. to Plt. 38, 7:30-4. Albert E. Furo, Ext. 84239.

**BROOKLYN:** Flatbush Ave. & Belt Pkwy. exit to Plt. 3, 7:30-4. J. Cange, Ext. 2627.

**BETHPAGE:** Plt. 36, 7:30-4. WE 5-7770.

**PLANT 1:** To Manhattan, nights. Theodore Baumann, Ext. 84919.

**CENTEREACH:** Middle Country Rd. vic., to Plt. 5, 8-4:30. Joann Belfiore, Ext. 3692.

**ISLIP TERR.:** To Plt. 3, 8:30-5. 277-0313.

**COMMACK:** To Plt. 38, 8-4:30. Anne Parker, Ext. 2962.

**BAYPORT:** To Bethpage, Plt. 25. HR 2-0628.

## Car Pool

**COMMACK:** Vic. Harned Rd./Vets Hwy. to Plt. 34. 543-0369.

**ELMHURST:** Jackson Hghts. to Plts. 5, 25, 14 & 15, 8-4:42. Pete Caloger, Ext. 1641.

**SMITHTOWN:** Vic. Rt. 25A & rte. 111 to Plt. 5 or 25. Tony Longano, Ext. 2275.

## Wanted

**APT.:** April 1 occup., 4 or 5 rm. around $175. 212 428-5660.

**MOBILE HOME:** To rent for 2 wks., must sleep 4 adults, self propelled. Bill Armstrong, Ext. 84013.

**BICYCLE WHL.:** Rear, 16 in., for air type tire. 732-3552.

**MANIFOLD:** Alum. hi-rise, 4-bbl., 383 c.i., Chrysler prod. John Cattonar, Ext. 86297.

**HOUSE:** Nr. Bethpage, walk to shop., good schools, need master bdrm. w/bath, 3 bdrm. w/bath, suit. 5; have house will trade or sell. Michael Furst, Ext. 9137.

**ROWBOAT:** Approx. 10 ft. w/wo eng. Harry Chocheles, Ext. 9646.

**AMPLIFIER:** Monophonic, preamp, approx. 20 w. JU 1-8635.

**BICYCLE:** Girl's & boy's, 3-spd. PY 6-0197, after 5.

**APT.:** 3½ rm. unfurn., Nassau or western Suffolk, for couple. Phil Furlano, Ext. 1665.

**BOAT:** 14 or 16 ft. sailing sloop or dory w/sails. 212 VI 6-2719.

**APT.:** 2 bdrm, pvt. home, Babylon/Bethpage vic. 587-6863.

## For Rent

**SKI CHALET:** Weeks & weekends, 1 mi. from Mt. Snow, Vt., 3 bedrm., 1½ bath, kit., liv. rm., sleeps 10. JU 6-8224.

**APT.:** Huntington Sta., furn., pvt. ent. & bath, hotplate, bus. lady only, $140 mo. 271-7367 evgs.

**ROOM:** Furn., Bethpage, pvt. ent. 822-3819 after 5.

**ROOM:** Furn., North Massapequa. 798-1676, at 12:30, or after 9 p.m.

**ROOM:** Lrg., suit. 2, pvt. bath, pvt. ent., walk. dist. to Plts 30 & 35. WE 1-3169.

**HOUSE:** Huntington Sta., 4 bdrm., stove & refrig., nr. W. Whitman Ctr., $250/mo., 1 yr. lease. 423-7221, after 5.

## Adoption

**COLLIE:** 5½ yr. male, AKC, champ bld. lines, all shots, good w/child. 333-4379.

## Free

**TV:** Philco, 2, cons. 21 in., interchange parts, serv. man., schematic, you pick up. Henry Carpenter, Ext. 3823.

## For Sale

**DODGE:** '68 Charger, R/T, 4-spd., metal. rac. grn., $2,300. Jerry Lehecka, Ext. 57-894.

**MISC.:** RCA 23 in. col. TV w/rem. cont. & cart, $250; Meteor SP-GH Sprobe, $45. 212-263-4426, after 6:30.

**SURFBOARD:** 9 ft. 6 in., $70. E. Pecic, Ext. 57-213.

**TRANSMISSION:** '68 Pont., Turbo-hydra., w/torque conv., $200. JU 8-6844.

**SEA SKIFF:** '60, 16 ft. Eastern, sol. mahog., less motor & contr., w/trailer, $350. 223-3823, after 5.

**BOAT:** 16 ft. Thompson, navy tp., cov., 40 hp Scott elec. start motor, Cox trailer, $350. Anthony Gurnari, Ext. 86141.

**VW:** '68 bug, beige, FM, $1,350. 587-6863.

## For Sale

**RUNABOUT:** 14 ft. fbrgls., windshld, run. lgts., contr., 25 hp Elgin, elec. start & gen., self bailer, tank, tlit-bed Tee Nee trailer, anchor, $350. 732-6065.

**HOUSE:** Centereach, 10 rm. col., 5 bdrm., 2 bath, 2 car gar., full bsmt., 100x128 corn., 3 yrs., ideal mother-daugh., o.h.w. heat, $35,000. 585-5528.

**HOUSE:** Melville, splt. lvl., 1/3 acre, 3 bdrm., firepl., gar., wooded, dishwasher, w-w, $31,000. HA 1-0271.

**HOUSE:** Col. Williamsburg style, Bay Woods, Aquebogue on Peconic Bay, 4 bdrm. w/cor. firepl., fam. sz. kit., ldry., den, 2½ bath, all elec. appl., pvt. bch., boat facil., take over 6% mtge., $54,250. 722-4792.

**MISC.:** Mod. din. rm. fixt., $35.; lvg. rm. lmps., $25 ea., set of 3 wal. tbls., $75; hand carv. pic., other items. 221-3032. after 5:30.

**MISC.:** 35 mm Kodak Pony IV, $25.; 16 mm movie cam., Revere, mag., $25,; couch, blue vel., $50. 757-7413.

# at your SERVICE

**This is a free service to Grumman personnel for non-commercial advertisements, accepted on a first-come, first-served basis. Classified advertisements are carried in PLANE NEWS only on the basis that everyone replying to such advertising will receive fair and equal consideration regardless of their race, creed, color, or national origin.**
**Type or print ad on form available at Employee Services and Engineering counters, and send via interplant mail to PLANE NEWS, Plant 28A, Bethpage. List home phone (with area code if outside Nassau or Suffolk). Limit: one ad per person per issue. No item under $10, no firearms or ammunition.**

**MISC.:** Mahog. 3-pc. Duncan-Phyfe. cof. & end. tbls., lthr. tp., reason. PE 5-8069, evgs.

**MISC.:** 2 blue broc. love seats; 1 antique cof. tbl.; 1 occas. antique tbl., Robt. Williams, Ext. 1248.

**GAS HEATER:** 20,000 BTU, vent thru wall, $35. 261-5783.

**SNOW THROWER:** Snow-bird, $175. Ted Gaal, Ext. 2588.

**PUPPIES:** Mini. poodle, AKC, blk. & silv., champ stk., $75. L. Byars, Ext. 7551.

**SCALE:** Baby, prof. mod. beam bal., best offer. J. Kessler, Ext. 1713.

**PLYMOUTH:** '66 Satellite conv., 383, 4-bbl., pwr. steer., 3 spd., auto., new tires, bks., shocks, exh., 47,000 mi., $1,695. 757-7413.

**AIR CONDITIONER:** Admiral 6,000 BTU, 7.5 amps, $100. Joseph Gattulli, Ext. 1526.

**RADIO:** Port. FM & all-band AM, Heathkit model GR-43A, set wired, needs new transis., $125. Bill Waltemath, Ext. 84844

**MISC.:** 36 in. round antique white marb. tp. tbl., & frtwd. prov. end tbl. & lamp. 466-3327.

**MARINE SYS.:** Linde FWC sys., for marine eng. to 350 c.i., new 80 GPM, Jabsco raw water pump, exp. tank, mount. brkts, hoses & fittings, $300. 277-9622.

**REFRIGERATOR/FREEZER:** G.E. duplex 2-dr., harvest gld., 18 cu. ft., frost free, 6 mo., $325. CH 9-4095.

**KITCHEN COUNTER:** Metal, white, yel. formica tp., 6 in. back splash, 6 ft. lg. w/16x22 sink install., $15. 825-4699.

**LENS:** 500mm for Hasselblad, 500C or 500EL, w/case, $450. HA 3-0627.

**MISC.:** Contemp. tbls., 1 cocktail, 1 lmp., $35 ea., 1 cor. sect. w/blt.-in end tbl., $50; Churchill cab. (3), stereo, turn tbl. & rec. cab., 23 in. TV cab. 744-5174.

**DRUMS:** Premier, 5 pc. set w/xtras, turq. metal flake. Lorraine Alfano, Ext. 1592.

**MISC.:** TV Emerson port., 14 in., $25.; TV RCA, 18 in., $45.; G.E. washer, 1 mo., $165; Westinghouse frig., frost free, $50. 538-6473.

**RUG:** Sz. 9x12, 100% nylon, bound edges, w/pad, red, 1½ yrs., $40. 489-2306.

**FLUTE:** For a beginner, $55. 757-8899.

**BICYCLE:** 26 in. Rollfast, red, still in cart., $25. PI 7-3415.

**CORVETTE:** '66 conv., 2 tps., 326/350 hp, $2,850. 889-5950, after 6.

**OLDSMOBILE:** '69 Cutlass, 4-dr. sed., air cond., pwr. bks. & steer., vinyl int., tint. glass, $2,600. 586-6112, after 5:30.

**BOAT:** 31 ft. Zobel Seafox, '63, depth finder, xtras, $4,500. 587-7866, after 6.

## For Sale

**BUICK:** '66 cust. Electra 225, 4-dr. hardtp., all pwr., air cond., vinyl tp. snows on whls., alarm, $1,595. Morton Danin, Ext. 3262.

**MISC.:** Bass guitar & amp., Univox cust. bass, hollow bdy., red; Hilgen bass amp., 2 chan. 15 in. spkr., $150 or trade for 6 cyl. car equal value. WE 5-6626.

**CONTROLAIRE EQUIP.:** Galloping Ghost R/C, incl. transmit., actuator & receiver w/Nicad batt. pk., wired, ready to fly, $55. HR 3-2806 after 5.

**MISC.:** Hydroplanes, 11 ft., 3 pt., fiberglassed chimes, w/wo 25 hp outboard motor; 16 ft. inboard, 3 pt. hydro hull. 727-8078, after 5.

**BASS GUITAR:** Gibson, mod. EBO, cherry red, Kustom bass ampl., mod. K-200B, 200w, two 15-in. spkrs, $500. PR 5-6593.

**TYPEWRITERS:** Olympia, full sz. kybd., pica, $75; Remington Quiet-riter, sm. kybd., pica, $25. 234-0613.

**WOODED PLOT:** ½ acre, Pocono Mts., lake & ski priv., $4,500. MO 7-2960.

**ARM CHAIRS:** 6, reupholstered. 545-3872, after 7.

**CAMERA EQUIP.:** Argus Match-matic C-3, w/lgt. meter, flash attach., close-up lens, lea. carry. case & vinyl bag, $50. 212 739-0554.

**MISC.:** 19 ft. Thompson, twin 40 hp Evinrudes, trailer & xtras, $990. 587-8998, after 6.

**WAGON WHLS.:** 40 in. dia., 8 in. hubs, 12 spokes, best offer. AN 1-1364.

**HOUSE:** Oakdale, dec. hi-ranch, 4 bdrm., 1½ bath, 2 car gar., lndscpd. ¾ acre; $7.000 cash over $19,000, 6¼% mtge., $212/mo. 567-3317.

**STEREO:** Mediterranean, sol. state, frtwd. cab., satin fin., 6 mos., $250. 698-1150 after 5.

**RUNABOUT:** 15½ ft. M.F.G., winter cov., 33 hp Evnirude, new trailer, $750. 921-3137.

**SAILBOAT:** Blue Jay, comp. w/rigging & sails, needs some wk., best offer over $350. 669-4477 after 6.

**PUPPIES:** Poodle, $25 ea. 421-5415.

**GER. SHEP.:** Stud, champ (Vom Kallengarten) ribbon win., 2 yrs. 538-1575 after 5.

**GER. SHEP.:** AKC, all shots, reason. 585-6683, after 5.

**TAPE RECORDER:** TC-530 Sony stereo, 6-7 in. reels tape, $170. 928-2398, after 6.

**MISC.:** 8 mm cam., proj., screen, light bar, all access, $105. Richard Fantasia, Ext. 86023.

**SPEED BOAT:** '67, 17 ft. Electro, 110 hp, in & outbd. Merc. motor, canv. & bonnet, $1,450. MO 5-5999, after 4.

**MISC.:** Boat & trailer, MFG fbgls., 16 ft. Little Dude trlr., $495. 921-3137.

**OUTBOARD:** 7½ hp, 5 gal. tank, auto-bail, $185. Frank Downs, Ext. 57-284.

**ROTARY MOWER:** 1, Craftsman 3.0 hp gas, 26 in. w/catcher; 1, Sunbeam 2 ¼ hp gas, 20 in., both $30. MO 5-7816.

**AIR COND.:** York, 9500 BTU, 220 volt, $125. 931-3254.

**REFRIGERATOR:** Westing.. 18 cu. ft. frost free, w/top freezer, $1,000. May Giacopelli, Ext. 1884.

**CHAIR:** Uphol. wing bk., $25. PE 1-5884.

**WORK SHOP:** Complete, reason. IV 9-4734.

**HOUSE:** Colonial, 4 yrs., 2½ bath, 4 bdrm., cent. air cond., w/w, SS, 2 car gar., pan. den, lndscpd, wood. h.w. heat, Smithtown-Commack area, $40,000. 368-1457.

**HOUSE:** Bay Shore, cust. ranch, 3-bdrm., bsmt. bar, sunk. liv. rm., lndscpd & fenced, $26,500. 665-1270.

**PROPERTY:** 5 acre wood., good blktp. rd., 2 mi. Lynchville, Maine, bdrs. White Mt. Nat'l. Forest, 1,000 ft. on Crooked River, $5,200. 588-7184.

**TREES:** Colorado blue & Norway spruce seedlings. Henry Kochany, Ext. 84102.

## For Sale

**BDRM. SET:** Rock maple, col. fin. dbl. bd., dress., chest & match. desk, $150. SU 5-1038.

**CASTRO:** Conv. sofa, dbl. bd, blue-grn. tweed, Danish, $50. 433-2745.

**PIANO:** Betsy Ross spinet, Lester, bnch., $195. JU 4-6387.

**ORGAN:** Lowrey Holiday deluxe, wal. 13 panels, 14 voices reverb sustain, etc., Leslie spkrs., auto. orch. cont., $1,000. 277-3842.

**FORD:** '68 Falcon Futura, V-8, pwr. bks. & steer., AM, fact. air, snows, auto. trans., $1,650. 935-8584 after 5:30.

**CHEVROLET:** '65, 2-dr. hardtp., auto., pwr. steer., 4 new w/w, 2 snows on rims, AM-FM stereo, posi rear, 327 eng., 38,000 mi., new bks., $1,300. John Spiezio, Ext. 84901.

**PONTIAC:** '67 Gran Prix, wh., blk. vinyl tp., pwr. steer. & bks., AM-FM multiplex, reclin. pass. seat, blk. int., $2,000. 822-2283 after 4.

**CHEVELLE:** '69, SS 396/375 hp, close ratio 4-spd., 410 posi, bkt. seats, cons., pwr. steer., alarm, 8,000 mi., warr., $2,900. 888-5140 after 6.

**CHEVROLET:** '68, SS 396, 9,000 mi., air cond., posi, gold w/blk. vinyl tp., 2 Sieberling snows on whls., $2.400. JU 8-0226 after 6.

**TOYOTA COROLLA:** '69, wh. 2-dr. sed., vinyl uphol., bkt. seats, 4-spd., w/w, new snows, $1,300. Mario Conforti, Ext. 3179.

**FALCON:** '63 Futura, 2-dr., $493. 271-7462.

**OLDSMOBILE:** '69, 98 hardtp., pwr. steer. & bks., auto., R&H, vinyl roof, $3,500. CE 9-9205 after 6.

**BONNEVILLE:** '67, 2-dr. vinyl hardtp., pwr. bks. & steer., air cond., 4 new H-70 tires & snows, new shocks. WE 8-6246.

**KARMAN GHIA:** '68, blue, auto., 7,000 mi., $2,000. MO 5-9094.

**CHEVROLET:** '67 pick-up, ½ ton, 6 cyl., hvy. dty. rear spgs. & clutch, 34,000 mi., $1,300. JU 1-0778.

**MOTORCYCLE:** '65 Ducati, 200 cc, skid plate, trials tires, tuned, $300. 354-6634, after 7.

**WHEEL RIMS:** 2, sz. 15 in. new, fit Chrys-Dodge prods, $20. Frank Lauricella, Ext. 9376.

**FLEETWOOD:** '67, blk. vinyl tp., air cond., all pwr., stereo, orig. owner., $3,100. Mary Anne Phillips, Ext. 3454.

**FALCON:** '63 conv., auto., R&H, 45,000 mi., $300. 751-3718.

**PUPPIES:** Dachshund, AKC, mini, wormed, shots, red fem. 928-0156.

**POINTERS:** Ger. shorthaired, sports or home, AKC, field & show, $65. Ronald Horn, Ext. 2896.

**STEREO:** Scott ampl., mod. 4270, sol. state, 65w; Scott FM tuner, mod. 350, ask. $250 for both. Bob Bidonde, Ext. 86046.

**HAM EQUIP.:** Clegg 99er, 6 meter transceiver, Hygain 3 element beam, AR-22 rotor, D-104 Astatic mikes. 466-3327.

**MISC.:** 100 ft. 3/0 stranded copper entrance cable for 150 amp serv., $40; 4 x 8 gunstock wal. Pionite, $10; Eng. coach baby carr., $15; antique sleigh bed & match. vanity, $55. 543-5365.

**MISC.:** Eng. coach carr., $25; mod. wal. step end & cof. tbl., $30; old-fash. school desk & seat, $10. 667-1023.

**COACH:** $100. 796-2574, after 5.

**PONTIAC:** '64 sta. wag., 9 pass., one owner. 367-4585.

**PONTIAC:** '67 LeMans, pwr. steer. & bks., vinyl tp., V-8, 4-spd., stereo, $1,600. Barry Blazer, Ext. 2554.

**VW:** -65, 33,000 orig. mi., sun roof, radio, $800. PY 8-1549, after 7.

**CHEVROLET:** '63 Impala hardtp., R&H, pwr. steer. & bks., $795. 864-8416.

**FIREBIRD:** '68, 350 c.i. auto., vinyl tp., pwr. steer., radio, 2 new snows. OR 1-5749.

**BUICK:** '69, GS-400, vinyl tp., air cond., mag whls., $3,200. 538-2236.

**DODGE:** '65 Coronet 500, 2-dr. hardtp., 8 cyl, R&H, auto., pwr. steer., blk. vinyl tp. turq. bdy., bkt. seats, cons., 4 new tires, $895. 735-4911.

**CHEVROLET:** '63 Bel Air, V-8, 2-dr., auto., pwr. steer., R&H, 2 xtra. whls., repair man. $450. Al Isaacson, Ext. 1646.

**CHEVROLET:** '68 sports van, new tires, low mi., tape, hvy. duty sus., $1,750. 281-4649.

**PICKUP:** '69 GMC ½ ton, 292 c.i. 6, 3-spd. trans., R&H, oversz. w/w, 10,000 mi. AN 1-5757, after 6.

**TRAILER:** '66 Nimrod, sleeps 4, new tires, ask. $300. PY 6-8363.

**HOUSE:** Elmont, 3 bdrm. Cape, 1½ car det. gar., fin. bsmt., oil heat, s/s, den, din. rm. 667-4373.

## For Sale

**SKIFF:** 20 ft. Commodore, Navy tp. & xtras, 75 hp, Evinrude '64; trailer, Holsclaw, '69, $1,750. LI 1-4616.

**DINGHY:** Fiberglass, 10 ft. Sailoar class, stow. alum. spars, dac. sails, bronze hdware & oarlocks, dagger-bd., oak rub rail & trim, $300. E. Malinka, Ext. 1255.

**MAST:** 100 ft., steel, 3 in. base, $50. 727-3455.

**MISC.:** Dietzgen slide rule (dec. trig. type log-log), $18; Kodak cam. Pony/flash, $10; Dejur movie cam., $10; Nat'l. Geo. Mag. (8 yrs), $10. LR 5-3951.

**FLUTE:** Boosey & Hawks, w/case, $65. 587-4413.

**TYPEWRITER:** Underwood Olivetti port. mod. 44, $50. 822-1145.

**CARRIAGE:** Atlas baby coach, offer over $10. 261-9132.

**HOUSE:** Bay Shore, 9 rm., 2 full bath, new. dec., new wir., new o.h.w. heat, alum. s/s, 2 blks. from marina, easily conv. to 2 fam., $24,500. 666-6198.

**HOUSE:** 2 fam., 6 rm. apts., full bsmt., nr. RR, $37,-500. 586-1422.

**FURNITURE:** 4 pc. mdrn. sect., foam cush., $50. SU 5-4067.

**BDRM.:** Rock maple, col. fin., dbl. bed, dress., chest, match. desk, $150. SU 5-1038.

**BDRM.:** Dbl. decker bunk beds, foam matt., ladder & rail, dress., bk. case tp., wal. fin., $145. RO 6-1264.

**TABLES:** 2 step tbls. & 1 cof. tbl., mdrn., $25. 587-4888.

**SEW. MACH.:** Straight stitch, $15. 234-3170, after 5.

**SEW. MACH.:** Singer elec., cab., $35. WA 1-0189.

**COUNTER TOPS:** Kit., formica, gas range & sink, 9 ft. tp. w/stainless steel sink, 52 in. top. w/Tappan gas surf. unit, 24 in. high cab. w/Tappan wall oven, 53 in. count. tp. 678-3651.

**DODGE:** '68 Charger, R/T 440 c.i. Magnum, 375 hp, 3-spd. auto., blue w/blk, vinyl roof, air cond., pwr., AM radio, 8-trk. stereo, $2,700. 884-9790, after 5:30.

**FORD:** $65, 6 cyl., cust. 500, std., R&H, $650. 929-4778.

**TORINO:** '69 GT conv., must sell. 271-7462.

**GTO:** '65, 400, reworked eng., cam, tach, gages, Holley Dual-feed carb., new batt., paint & starter, fbgls. tires, chr. rev. rims, headers, alarm sys., 3-spd. auto. $1,400. Harold, Ext. 84062.

**FORD:** '57 T-bird, white w/red int., 8 cyl., std., all pwr., heater, $2,100. 277-1147.

**FORD:** '55, Vict., snows, auto. trans., pwr. bks., $25. RO 4-1304

**COUNTRY SQUIRE:** '67 sta. wag. 10 pass., roof rack, pwr. bks. & steer., auto., $1,800. D. Nonnenmacher, Ext. 84813.

**BUICK:** '66 Electra 225, 4-dr. hard tp., air cond., all pwr., orig. owner, $1,600. 724-1550.

**BATTERY:** New Atlas, 12 volt, 53 amp, $15. 724-0962.

**CAMPER:** Open Rd., 8 ft., icebox, stove, sink, $995. TU 8-2315, after 5.

**GOLF CLUBS:** Haig Ultra, 4 wds., 7 irons, bullseye putter, reg. shafts, D-4 swing wgt. 541-0456.

**HASSELBLAD:** New w/guar., 150 mm f4.0, Sonnar 500C & 500EL, $340. Soon Lew, Ext. 86874.

**SIMUL-LOGIC:** 7 chann. dig. proport. R/C w/6 servos, $250. 541-5159.

## For Sale

**COIN COLLECTION:** Pvt. coll., disc. prices (US & Canadian), ind. coins & comp. sets. OV 1-4249, after 5.

**HOUSE:** 3 bdrm. ranch, Strathmore Stonybrook "S" sect., paneled, beamed fam. rm., w-w, slate foyer, fncd., wooded, patio, 6% mort., $36,990. 751-2519.

**FIREPLACE:** All metal w/firebrick hearth & 7 in. blk. enam. flue pipe w/elbow & damper, $80. Burr Mead, Ext. 86959.

**MISC.:** 8 wood comb. storms & screens, $40. MO 5-9314, after 5.

**PUPPIES:** Beagles, AKC, avail. March 1 (6 wks. old). WE 1-8956.

**PUPPIES:** Germ. shorthaired pointer, AKC, dual potential, champ sire, pointed dam. 589-7858.

**SEW. MACH.:** Visetti port., zig-zag (all Singer parts), $50. MO 7-5599, bet. 5&7.

**SKI BOOTS:** Buckle, Raichle 8½-9m, $30. Koflach 8½-9½M, $15; dbl. lace Koflach 8½-9½M, $70. Art Eliot, Ext. 7527.

**MISC.:** Lge. drafting tbl. w/3 dwrs., $20; mangle, $20; drums—dbl. snare, bass & fl. tom, $50; HRO-7 recvr., $35; or trade for photo. equip., coins or stamps. R. Decker, Ext. 9325.

**BOAT:** '67, 16 ft. Larson fbgls., mech. steer., 18 gal. gas tank, vinyl tp., '67, 80 hp Johnson Electra., '67 Shoreline trlr., $1,400. 735-6280, evgs.

**SHIP MAST:** Wooden, 25 ft. track & stays w/turn-buckles, $45. WA 1-1284.

**OUTBOARD MOTOR:** 7½ hp, 5 gal. tank, auto-bail, $175. Frank, Ext. 57-284.

**DRUMS:** Ludwig, pink champagne, bass, snare, tom-toms, hi-hat, 1-20 in. Zildjan, 2-14 in. Zildjans, 1-14 in. Paiste, stool, $350. WA 1-0586, evgs.

**DRESSES:** Winter maternity, sz. 14, 1 yr. 785-6970.

**MERCEDES:** '52, 170 VA, 4-dr., 4 cyl., 4-spd., gas eng., 60,000 mi. 935-3040, after 5.

**VW:** '67 Bug, air cond., R&H, $1,100. 234-6462.

**VW:** '68 Squareback, air cond., R&H, w/w, std. trans., $1,750. 585-8665.

**OPEL KADETT:** '67, recent eng. o'haul, new clutch, $775. WE 8-4524.

**MUSTANG:** '67, dk. grn., wh. int., reg. gas, V-8, auto., pwr. disc bks., HD susp., posi rear, 7:75 snows & rims, 28,000 mi., $1,300. 893-0898.

**CHEVROLET:** '65, 2-dr. tan Biscayne, 6 cyl., std. trans., 58,000 mi., $695. MO 9-1650.

**MERCEDES:** '62, 190 SL, red conv., new eng. & tires, $1,800. T. Burns, Ext. 9325.

**CHEVROLET:** '63 Impala, 4-dr. hardtp., auto., pwr. steer., w/w, 283 c.i. V-8, MA 7-7375.

**MOBILE HOME:** Furn. $90/mo., Aquebogue. 722-3017.

**HOUSE:** Smithtown hi-ranch, 4-bdrm., 1½ bath, den w/patio, kit. w/porch, price open. 724-4222.

**HUTCH:** Mod., wal. tp., 4 shelf, encl. wh. formica bar or desk area, $50. 368-1819.

**PUPPIES:** Weimeraner, AKC, field stock, silv. gry. HR 3-4458.

**TYPEWRITER:** Remington noiseless, $30. GR 5-4565, after 5.

**TAPE RECORDER:** Norelco, port., stereo cont. 401, 4-spd., 4-trk., 65 w, comp. transis., multiplay & P.A. sys. & mike (stereo), $225. Geo. McGrath, Ext. 3639.

"You got several sympathy cards and a crank letter from the Safety Committee at the shop"

## For Sale

**CORVETTE:** '68 coupe, 327-350, 4-spd., 3.36 posi., AM-FM, warr. snows, alarm, $3,850. 549-4523, evgs.

**CORVETTE:** '69, white coupe, 350 hp, 350 c.i. 289-5297, after 4.

**IMPALA:** '66, R&H, w/w, A/T 2-dr. sed., $1,250, 52,000 mi.; also '66 VW sed., 1300 series, 58,000 mi., $925. 231-7760.

**OUTBOARD:** '66 Chrysler 9.2 motor, elec. start., carrier, 2 gas tanks, cush., $250. Jeannette Aitken, Ext 86893.

**HOUSE:** Huntington (Rollingwood), wooded ⅓ acre, 3-bdrm., split, pan. liv. rm. w/beamed ceil. & firepl., new kit., 20x15 patio, $29,000. AR 1-2581.

**HOUSE:** Holbrook, 8 rm., 2 car gar., 44x24 expan. attic, 100x150 lot, 3 bdrm., 2 bath, den, fam. rm. SU 1-6181, after 5.

**HOUSE:** Shirley area, 3 bdrm. ranch, 4 yrs., sunk. liv. rm. w/iron rail., full carpet, 2-car gar., lot 60x150, $18,500. 281-3313.

**HOUSE:** Legal 2 fam., 6 over 6 rms., vill. of Farmingdale, redwd. swim. pool, $48,000. MY 4-2285.

**PUPPIES:** Germ. shep., AKC, blk. & silv. IV 1-4051, after 5.

**PUPPIES:** Germ. short-hair, AKC, avail. March 1. 271-6349, after 6.

**DALMATIANS:** Crown Jewel, AKC, born Christmas. 883-1596.

**CHEVROLET:** '66 Impala, 4-dr., blue, auto., pwr. steer., 6 cyl., w/w, snows, $1,095. FO 8-5722.

**CHRYSLER:** '62, Newport sta. wag., 9 pass., R&H, pwr. steer. & bks., trans. needs wk., new elec. pts. & exh. sys., 2 snows on rims, $90 or best offer. 584-6693.

**VW:** '67 Squarebk., R&H, sunroof, best offer. 473-3633.

**RAMBLER:** '61, Class. wag. auto., R&H, 25,000 mi. on new eng., xtra spare, serv. man., $190. PY 6-1108.

**MERCURY:** '69 Cougar, disc bks., 4-spd., H.D. sus., 12,000 mi. under war., $2,700. 586-7254 after 6.

**CHEVROLET:** '57 conv., needs eng., $50. WE 5-0434, after 4.

**CAMARO:** '68 hardtp., V-8, auto., pwr. steer. & bks., vinyl tp., air cond., w/w, 10,000 mi., $2,400. AR 1-1252.

**PLYMOUTH:** '64 Sport Fury III, air.cond., pwr. steer., man. bks., 318 c.i., eng. (230 hp), new trans., bks., carb. & batt., $600. PE 1-1346.

**OLDSMOBILE:** '64 Super 88, pwr. steer. & bks., R&H, 4-dr. hardtp., 56,000 mi., $700. Janet Andersen, Ext. 2483.

**FORD:** '32, 5-wind. coupe, chopped, channeled, 327 Vette eng., bal., clearanced, 360 hp, quads, I-beam front end, pol. Kustomags, 80% comp., $1,200. 271-8577.

**RAMBLER:** Ambassador, 6 cyl., 4-dr. sed., R&H, auto., trans., pwr. steer., 2 snows on rims, new batt. MO 7-1759.

## For Sale

**PONTIAC:** '68 Firebird 400, avoc. grn., pwr. steer. & bks., auto., cons., Mag-type Rally II whls., gauges, 400 c.i., 330 hp, $2,450. Robert Visalli, Ext. 1449.

**MUSTANG:** '65 Fastback, 289 V-8, auto., bkts., R&H, wide ovals, $1,095. 364-0169, after 6.

**MUSTANG:** Shelby Supercharged, '65, 289 c.i., hi-rise man., Doug. headers, Traction Masters, Hurst 4-spd., new Poly. tires, Marchal driv. lgts., $1,550. FR 4-7772.

**BUICK:** '63 LaSabre, 4-dr. hardtp., pwr., new trans., bks, tires, $600. OV 1-0992.

**JAGUAR:** '64, red coupe, XKE, Pirelli tires, $2,000. PY 6-7105, before 5.

**FORD:** '58, 4-dr. sed., new 390 c.i., eng., $75. Stuart Wood, Ext. 1195.

**PORSCHE:** '66, 911, Webers, Konis, elect. ign., 5-spd., chr. whls., radial tires, AM-FM, gas heater, head rests, gray w/tan int., $3,900. HA 7-0035.

**T-BIRD:** '68, air cond., all pwr., vinyl tp., 2-dr., bkt. seats, $3,500. James Noll, Ext. 3700.

**MOTORCYCLE:** B.S.A., twin carbs, 650 cc, 4,000 mi. PY 6-2377, after 5.

**REFRIGERATOR:** Sears, 14 cu. ft., $50. 289-5606.

**HOUSE:** 2 fam., 2-6 rm. apts., full bsmt. $37,500. 586-1422.


plane GRUMMAN news

Published twice a month for the employees of Grumman Aerospace Corporation, Bethpage, N. Y. 11714, as a function of the Public Affairs Dept., Vice President J. B. Rettaliata, director.

Editor
Brian Masterson

Associate Editors
Claire Imrie
Al Wehren

Official Photographers
Photo & TV Dept.

Ads, Distribution
Dorothy Zeeb

Telephone
Plane News: 3293
Plane News from outside line:
LR 5-3293


# CALENDAR of events

Notice of events for period March 2-13 should reach Plane News by Wed., Feb. 18.

**Amateur Radio Club:** Wed., Feb. 18, 5 p.m., Plant 28 Auditorium. Norm Sternberg on "Apollo Communications." Emmett Goodman, Ext. 87121.

**Amer. Inst. of Aero. & Astro.:** Thurs., Feb. 19, Four Seasons, Syosset. John Sweihart, chief engr. of Supersonic Transport, Boeing, spkr. Wed., March 18, Lt. Gen. Austin W. Betts, chief of R&D., Dept. of Army, spkr. Mtgs. held at Four Seasons, Syosset. Jules Braunstein, Ext. 9793.

**Amer. Prod. & Inven. Cont. Soc.;** Tues., Feb. 17, Holiday Manor, Hicksville Rd., dinner 6:30. Ernest Theisen of Stanley Works on "Forecasting & Planning Production Capacity." Reserv. Norm Heilweil, Ext. 1855.

**Aquatic Assoc.:** Thurs., Feb. 26, 8:30 p.m., Larkfield Suburban Club, Northport, gen. mtg. & movies. Prospective members welcome; Sat., Feb. 28, 9-1 a.m., Thatched Cottage, Centerport, dinner & dance. Reserv. Joe Grella, Ext. 9822, or Ivan Howard, Ext. 9163.

**Coin Club:** Wednesdays, 12:05-12:45, Plant 25 Vendor Conf. Rms. Irv Atkins, Ext. 1874.

**Engineering Model Soc.:** Second Tues. ea. month, 7 p.m., Room 1, Plt. 28. Bus. & disc. G. Myers, Ext. 1341.

**Fencing Club:** Wednesdays & Fridays, 5 p.m., Plant 30 Cafeteria. Joe Campisi, Ext. 1134.

**Horseback Riding Club:** Wed., Feb. 25: 5:30 p.m., lobby, Plt. 28, dinner afterwards, Royal Viking, Woodbury. Mtg. Joseph Manfre, Ext. 3926.

**L.I. Ind. Nurses Assoc.:** Thurs., Feb. 19, 8 p.m., Plant 28 Auditorium.Monthly mtg. Spkr. Raymond Murray, M.D., Nassau County Health Dept. Mary Gise, Ext. 3723.

**Stamp Club (Bethpage):** First 3 Wednesdays of month, 5 p.m., Plant 30 Cafeteria. Circ. bk., sales, swap., auction. Harold Haug, Ext. 3473.

**Retiree Club:** Wed., Feb. 25, 1:30 p.m., Holiday Manor. Reg. monthly mtg. GAA, Ext. 2133.

**Toastmasters Club:** Wednesdays, 6 p.m., Town & Country Diner, Syosset. Pub. speaking prac. Geo. Breen, Ext. 1651.

**Deputy Secretary** of Defense David Packard was at Grumman recently for F-14 Program briefing as well as a review of other corporate military programs. At left, the Defense official examines a test article at Plant 3 with Artie August, Boron Program manager, and Air Force Col. Ray Furlong. Below, the Deputy Secretary of Defense examines F-14 production progress at Plant 1 with Joe Cipp, F-14 Production manager.
(Photos by Fred Annette)

# Defense, Marine officials view F-14

**Marine officials,** Maj. General Louis Metzger, Deputy Chief of Staff, and Maj. General Marion Carl, who commands 2nd Marine Air Wing, examine F-14 model during their visit to Bethpage.

**Time out** for coffee break provides Vice President Mike Pelehach and Lt. Col. Frank Peterson a chance to chat about F-14. The Marine group also visited Calverton to view A-6 activities.

**Design criteria** was topic of discussion between Joe Rodriguez, deputy mgr., F-14 Engineering, and Lt. Col. Ray Stewart of Marine Headquarters.
(Marine photos by Bob Settles)

**Participants** in F-14 review included Brig. General Jay Hubbard, Director of Information for the Marines, F-14 Deputy Project Director Joe Rees, and Ross Mickey, deputy to Vice President Bill Zarkowsky.